FORM 9-1648
MARCH 1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I

Stage III

OPERATOR'S MONTHLY VOUCHER

For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $114,180.00

Gov't. Participation %50 $ 57,090.00

Operator's Name Hicks Dome Account
c/o Gilbert Kerlin, Esq.

Address Shearman and Sterling, 53 Wall St.
New York, NY 10005

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (1)		$		$		$		$
Dozing, hours	20	250.00	20	250.00	20	250.00	20	[illegible]
Rotary demobil.	½	175.00	½	175.00	0.5	175.00	0.5	175.00
Drilling	1937	8248.00	1937	8248.00	1937	8,248.00	1937	8,248.00
Service time	380	7435.00	380	7435.00	380	7,435.00	380	7,435.00
Mud & cement	139.5	825.96	139.5	825.96	194 1/	825.95 1/	194	825.95
Casing, surface	296.6	444.90	296.6	444.90	296.6	444.90	296.6	444.90
Core drilling, mobil.	½	400.00	½	400.00	0.5	400.00	0.5	400.00
Set-up/casing	29	565.50	29	565.50	29	565.50	29	565.50
NX 500-1000	324	1603.80	324	1603.80	324	1,603.80	324	1,603.80
1000-1500	457.7	2517.35	457.7	2517.35	457.7	2,517.35	457.7	2,517.35
BX 500-1000	500	2850.00	500	2850.00	500	2,850.00	500	2,850.00
1000-1500	727.3	4500.96	727.3	4500.96	727.3	4,500.96	727.3	4,500.96
1500-2000	763.0	4763.00	763	4763.00	763	4,763.00	763	4,763.00
2000-2500	141	937.65	141	937.65	141	937.65	141	937.65
Casing shoes	3	583.44	3	583.44	3	583.44	3	583.44
Reaming, hours	3	67.50	3	67.50	3	67.50	3	67.50
Inst./remove casing	10	195.00	10	195.00	10	195.00	10	195.00
Standby	3	56.25	3	56.25	3 hr.	56.25	3hr.	56.25
Cementing (hole stab.)	60	1170.00	60	1170.00	60 hr.	1,170.00	60	1,170.00
Wedge	1	230.63	1	230.63	1 2/	230.63 2/	1	230.63
Lost, damg. casing	110	319.00	110	319.00	110	319.00	110	319.00
Category (2)								
Geologist-Supervisor	3	4200.00	3	4200.00	3 mo.	4,200.00	3 mo.	4,200.00
Assistant Geologist	1	700.00	1	700.00	1 mo.	700.00	1 mo.	700.00
Sampler	2	247.57	2	247.57	2 mo.	247.57	2 mo.	247.57
Category (3)								
Core boxes	342	427.50	342	427.50	342	427.50	342	427.50
Category (7)								
Office-secretarial	3	450.00	3	450.00	3 mo.	450.00	3 mo.	450.00
Totals Stage III (allowable at 50%)						44,164.00		44,164.00
Stage I (allowable at 50%)								73,385.59
Stage II (allowable at 35%)								63,676.52
TOTALS		$44,164.01		$44,164.01		$		$ 181,226.11

y that the above bill is correct and just and that payment therefor has not been received.

June 18, 1974 *Payee Hicks Dome Account
Joseph A. Porter

Title Geologist

ucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate ll as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treas- case may be.

se statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a se. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature Harold Hirbourne Chief, OME ~~Field Officer~~ Date 7/24/74

Approved for: $22,082.00 (SUBJECT TO AUDIT)

Signature FAN

Date 19 Aug. 1974 Vou. No. 05176A

(SEE OTHER SIDE)

FOR OPERATOR'S USE	FOR GOVERNMENT USE
RKS	REMARKS
	1/ Claimed $825.96 Allow 825.95 Disallow $0.01 Arithmetical error on Invoice No. 6, pg. 3, Boyles Bros., Oct. 31, 1973. No. of sacks claimed (139.5) does not agree with total billed on Invoice No. 6, pg. 3 plus total billed on Invoice No. 7, pg. 1, Nov. 30, 1973. 2/ A wedge is analagous to a casing shoe and used to deflect the drill rods past a cavity at about 330 feet. It saved the hole from being abandoned. I recommend that it be allowed as claimed.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. For items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated Costs of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's share of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

Box 447

Phone (618) 285-6685

Joseph A. Porter
Geologist
Rosiclare, Illinois
62982

June 20, 1974

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U.S. Geological Survey
National Center, Mail Stop 920
12201 Sunrise Valley Drive
Reston, VA 22092

Re: OME-6873 (Fluorspar, et al.)
Hicks Dome Account
Hicks Dome Property
Hardin County, Illinois

Dear Mr. Kirkemo:

Enclosed is a composite voucher for the months of September, October, November and December, 1973, for Stage III of the contract. For the sake of simplicity in presentation the material is submitted in four parts. These are:

Part I Submitted in quadruplicate. Consists of Form 9-1648 for the time period with totals and accumulated totals. This is essentially a composite of the supplementary parts. Explanatory footnotes and the Operator's Report are included. Some invoices which apply to several phases are attached.

Part II To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (abandoned).

Part III To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (completed).

Part IV To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-9.

Part V To supplement Part I. Consists of costs incurred in Categories 2, 3 and 7 during this period.

Due to difficulties in obtaining copy work only one copy of the supplementary material is included.

Hopefully this will facilitate interpretation of the voucher.

Since none of the holes for this stage were completed, the summary of the geology will be included with the next voucher.

As discussed several times by phone during this period of time, both holes encountered considerable difficulty in getting started. Actual costs greatly exceed those allowed in the contract. The following summarizes cost incurred, amount claimed and the total amounts not claimed here.

OME-8 (abandoned)

Total Invoiced Cost	$ 12,376.61
Claimed for reimbursement	9,019.46
Excess	$ 3,357.15

OME-8 (completed)

Total Invoiced Cost	$ 7,669.30
Claimed for reimbursement	5,459.40
Excess	$ 2,209.90

OME-9

Total Invoiced Cost	$ 7,666.81
Claimed for reimbursement	3,340.00
Excess	$ 4,326.81

Total excess of cost not claimed $ 9,893.86

We are hopeful that suitable amendments can be made that will allow us to submit these costs for reimbursement.

Please advise if you need further documentation or explanation of the voucher or the supplementary material.

Sincerely,

Joseph A. Porter

cc. J.L. Carroll
Enclosures

OPERATOR'S REPORT

Sept. Oct. Nov. Dec. 1973

Considerable difficulties were encountered in drilling OME-8 and OME-9. The first attempt to drill OME-8 was abandoned and the hole was moved twenty feet where the hole was completed. Problems on both holes were due principally to cavities. These holes are discussed separately.

OME-8 (FSB-3) - Abandoned

This hole was first drilled with air rotary to a total depth of 760 feet. Solid rock was encountered at 107.5 feet and 7 inch casing was set. The hole was then drilled with a down-hole hammer and tricone rock bits to a total depth of 760 feet.

Several cavities were encountered between 107.5 and 300 feet. They caused no real problems for the rotary. A large cavity was encountered between 300 and 320 feet. At this point all cuttings were lost.

The cavity was initially filled with rubble and chert cavings. As drilling progressed from 320 feet to 760 feet most of the cuttings apparently accumulated in this cavity and several smaller cavities below. Considerable difficulty was encountered in getting the bit past 320 feet when bit trips were made.

An attempt would have been made to set 4 inch casing through the cavity using the air rotary drill. However, the casing was not readily available. Contractor inventories of NX casing were also insufficient in as much as what was available was being used in holes then being drilled. It was decided to move the rotary to the next hole, OME-9, and set the NX casing in OME-8 with the core drill.

Initial attempts to set NX casing were unsuccessful. An attempt was made to wash the hole out using a tricone bit and drill mud. This was also unsuccessful. NX casing was advanced to approximately 330 feet by washing in front of the casing with a 2 15/16 inch rock bit and then washing the casing down. The casing was advanced to 380 feet. The NX casing subsequently twisted off in the cavity leaving 60 feet of NX casing and a casing shoe in the hole. Because of the caving cuttings and rubble it was impossible to fish the tools.

An attempt was made to wedge the hole at 331 feet and redrill from that point. Because of the openings and the size of the hole, it was impossible to get cement to stay around the wedge so that the hole could be drilled. Several attempts were made to cement. Both were unsuccessful.

Because of the fish in the hole, bad caving ground and the inability to wedge past the fish it was decided to abandon the attempt to set casing and move.

It is possible that the decision to abandon should have been made earlier. However, at the time it was felt that a short move would (and did) encounter the same difficulties and it was desirable to save the 760 feet of hole that had already been drilled.

Amount claimed on Part II of the voucher totals $9,196.46. Actual cost incurred is as follows:

DiKor	$ 3,254.31
Boyles (hourly)	6,201.00
Materials	2,852.30
Total Cost	$12,376.61
Amount claimed for reimbursement	9,019.46
Unclaimed portion	$ 3,357.15

During this period of time, Boyles Bros. assigned their field superintendent, J.D. Conway, to the job in order to be sure best efforts were made to set the casing.

OME-8 (FSB-3) - Completed

A rotary drill was not readily available to start another hole. Therefore it was decided that it would be simpler to attempt to drill the hole using the diamond drill. Due to cavities this hole also encountered considerable problems between 0 and 333 feet. The hole was drilled with a tricone bit to 105.1 feet where solid rock was encountered. Four inch casing was set to this point. Various small cavities with caving ground were encountered. At 270 feet caving ground necessitated that NX casing be set and the hole reduced to BX. An additional 10 feet of BX was drilled to 280 feet and NX casing was reamed that distance.

Various cavities were encountered down to 330 feet. The hole could only be advanced by drilling BX and reaming the casing behind the BX drill rods. Several attempts were made to drill with the rock bit through the NX casing. Two casing shoes were totally destroyed by the caving chert. These methods were successful in getting the hole to 333 feet. From this point on no particular problems were encountered.

As with the previous hole, the interval from 0-500 feet was very expensive and exceeded the amounts allowed for in the contract. Total costs were as follows:

Boyles (hourly)	$ 5,265.00
330-500'	951.90
Other & material	1,452.40
Total Cost	$ 7,669.30
Amount claimed for reimbursement (Part III)	5,459.40
Unclaimed portion	$ 2,209.90

A fault was encountered near the base of the Maquoketa. The fault zone consisted of breccia and cavities. The largest cavity was 30 feet thick and was encountered from 1333.5 to 1363.5. Since we had already reduced to BX an attempt was made to complete the hole. The hole was advanced to 1450 feet when the rods twisted off in the cavity. Numerous attempts were made to fish the tools. These were unsuccessful. One hundred and ten feet were lost.

A wedge was set 68 feet above the top of the cavity and the hole redrilled. Fortunately redrilling missed the cavity and the hole was drilled to a depth of 1,763 feet during this period.

OME-9 (Hamp 8)

This hole was also predrilled by using air rotary in September. Solid rock was encountered at 107.5 feet and 7 inch surface casing was set. The hole was then drilled by down-hole hammer and tricone to a total depth of 760 feet. As with OME-8 numerous cavities were encountered in the upper 300 feet of the hole. Few samples were recovered. Drill cuttings apparently filled various cavities throughout the upper 300 feet of the hole.

Casing was not available to set with the air rotary drill. Consequently it was decided to let the diamond drill contractors set the casing when coring was to begin. In order to speed up the work, a second diamond drill contractor, Sprague and Henwood, was mobilized to finish this hole. The drill was set up on October 25, 1973. By this time the cuttings in the cavities had time to flow back into the hole and effectively plug it.

Considerable difficulty was encountered in washing out the hole and setting casing to bottom. The casing could only be advanced by drilling beneath it and letting it fall as the hole was cleaned out below. Several twist-offs occurred. Total of 176.5 hours were required to set casing by these methods. Summary of costs is as follows:

DiKor	$ 3,254.31
Sprague & Henwood (hourly)	4,412.50
Total Cost	$ 7,666.81
Amount claimed for reimbursement (Part IV)	3,340.00
Unclaimed portion	$ 4,326.81

The hole was subsequently drilled to 1,457 feet with NX wire line tools. Several minor cavities were encountered necessitating the reduction to BX. The hole was then drilled BX from 1,457.7 to 2,141 feet at the end of this period.

Respectfully submitted,

Joseph A. Porter

OME-8 (FSB-3) Abandoned

PART 2

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage III

To Supplement
OPERATOR'S MONTHLY VOUCHER

For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $
Gov't. Participation % $

Operator's Name Hicks Dome Account
Address

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
		$		$		$		$
Dozing, hours	10	125.00						
Rotary - drilling	760	3040.00						
1 Service time	250	4900.00						
Mud & cement	91	559.21						
Surface casing	107.5	161.25						
Set-up/initial casing	12	234.00						
		9019.46						
TOTALS		$		$		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee _____

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

See attached sheet for footnote.

Approved as noted, subject to field examination and audit.

Signature _____
OME Field Officer Date

Approved for: $
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

Notes to Supplement
Part 2 Sept. Oct. Nov. Dec.

1. A total of 249 hours was expended in attempting to recenter the rotary hole. Broad categories were as follows.

set up	12 hrs	
fishing, washing & drilling to advance casing	136 hrs	
Mix mud	14 hrs	
casing & centering	87 hrs	
	249 hrs @ $19.50 =	$ 4855.50
	+ 1 hr @ 45.00	45.00
		$ 4900.50

Request that this amount be approved even though it exceeds the amount allowed in contract.

2. Includes 73 bags of mud @ $401.50 and 20 bags of cal-seal cement at $157.71. Cal-seal ($7.88/bag), a fast setting cement was used in place of lumnite which was not immediately available.

Telephone: Area Code 618
Office 382-4184

P. O. Box 389
Carmi, Illinois 62821

In Account With

DiKar

a division of scru-tor inc.

TO

Hick's Dome Project
P.O. Box 506
Rosiclare, Illinois 62982

Date 9/21/73

Invoice Number 30-211-4

Delivery Ticket

Lease ~~H~~ FSB-3
(OME-8)

TERMS: 30 Days Net.

Part No.	Description	Unit Price	Amount
DRILLED:		760' @ $4.00/ft	$ 3040.00
COMPANY TIME:	Wait on Cat	1 hr @ $45.00/hr	45.00
MATERIAL:			
	7" Casing left in hole	107.5' @ $1.50/ft	161.25
	5% Ill. R.O. Tax on $161.25		8.06
		Total Invoice	$ 3254.31
		Illinois Delivery	

CERTIFIED TRUE COPY

James A. Lane

el Phone: Area Code 618
Office 382-4184

P. O. Box 389
Carmi, Illinois 62821

In Account With

DiKor

a division of sew-kor.inc.

TO

Hick's Dome Project
P.O. Box 506
Rosiclare, Illinois 62982

Date 10/19/73

Invoice Number 30-121

Delivery Ticket 1522

Lease

TERMS: 30 Days Net.

Part No.	Description	Unit Price	Amount
	Surface Casing		
.30 ft.	Used Range 1 - 4-1/2" 8 rd. Thread Casing @ $1.50/ft		$ 532.20
mile	Round trip to deliver casing	@ $0.55/mi	77.00
	5% Ill. R.O. Tax on casing		26.61
	Total Invoice		$ 635.81
	Illinois Delivery		

Casing put into inventory and used on subsequent holes

used on stage III

CERTIFIED TRUE COPY

ES:
32-4134
34-4511
sville Line
3926

Dikes
a division of Sow-Far, Inc.
P. O. Box 339
CARMI, ILLINOIS 62821

Nº 1522

Delivery Ticket

Date 10-16-83

Joe Parker (Hank Dome)

Pur. Order No.

Well No.

Lease

Engineer Bruce

State Illinois

Rental ☐ Sale ☑ Service ☑

Part Number	DESCRIPTION	Unit Price	Amount
80	Used Rings - 1. 9" 8 Rd Thread Casing	150	532.20
0	Round Trip Haul of Tools & Trailer to & Hike Camp Location	.55	77.00
	Sales Tax		26.61
			635.81

CORE TESTING
DRILLING EQUIPMENT
ADDITIVES

BOYLES BROS. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

INVOICE DATE: October 31, 1973
INVOICE NUMBER: 33-3
ORDER NUMBER: 6
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
c/o Mr. Joseph Porter
P.O. Box 447
Rosiclare, Ill. 62982

Invoice No.	From	To	Footage	Rate	Total
B-2	2385	2500	115	$ 7.50	$ 862.50
	2500	2545	45	8.40	378.00
	Surveying		7 hrs.	19.50	136.50
	Pulling Casing		48 hrs.	19.50	936.00
	Mud used to hold cave to get down to stuck casing		5 sks.	2.75	13.75
	Casing lost and damaged in hole		280 ft.	2.90	812.00
	NX Casing shoe lost in hole - Serial #3S-14890 15.46X9.50 + 42.00				188.87
	Rental on Eastman Camera				202.49
			+ 15%		30.37
					3,560.48

CERTIFIED TRUE COPY

49 hours

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN

...RILLING
...ILLING
...N TESTING
...RILLING EQUIPMENT
...DDITIVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

...E DATE: October 31, 1973
...UMBER: 33-3
...UMBER: 6
...NTRACT: HICKS DOME Rosiclare
... TERMS: As per contract
...CATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
Page 2

...ole No.	From	To	Footage	Rate	Total
...B-3	Setting over and trying to clean out hole				
...ME-8) abandoned	Weekstarting Oct. 8th and ending Oct. 13th		117 hrs.	$ 19.50	$ 2,281.50
	Week starting Oct 15th and ending Oct. 20th		120 hrs.	19.50	2,340.00
	Week starting Oct. 22nd thru Oct. 25th		81 hrs.	19.50	1,579.50
...E-8 completed	Moving over and starting new hole				
	Hourly rate - Oct. 26 & 27		39 hrs.	19.50	702.00
	Oct. 29, 30, 31		40 hrs.	19.50	780.00
					7,683.00

DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

HICKS DOME ACCOUNT
c/o Mr. Joseph Porter

LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

Total

. 1973

RILLING
G

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NG EQUIPMENT
IVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

HICKS DOME ACCOUNT

DATE: October 31, 1973
MBER: 33-3
UMBER: 6
TRACT: HICKS DOME Rosiclare
TERMS: As per contract
CATION: Rosiclare, Ill.

ole No.	From	To	Footage	Rate	Total
B-3 Cont.	Materials used in hole:				
	Mud -	50# bags	48	$ 2.75	$ 132.00
		100# bags	49	5.50	269.50
	Cal Seal	100# bags	20	7.885	157.71
					23.66
	NX Casing		80 ft. +15%	2.90	232.00
	NXWL rods		30 ft.	3.60	108.00
	PK rod		10 ft.	4.80	48.00
	N rod		1 ft.	12.57	12.57
	NXWL rod to N rod adapter				10.42
	1 - 6¼" Rock Bit			54.04	100.95
	2 - 3 7/8" Rock Bits			55.11	108.08
	2 - 2 15/16" Rock bits				110.22
					Cont.

DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

HICKS DOME ACCOUNT
Mr. Joseph Porter

1973

RILLING
G
TING
NG EQUIPMENT
IVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

DATE: October 31, 1973
MBER: 33-3
MBER: 6
TRACT: HICKS DOME Rosiclare
TERMS: As per contract
ATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
Page 4

le No.	From	To	Footage	Rate	Total
SB-3 Cont.	NXC Shoe - Serial # 3S-23855 16.05 x 9.50 + 42.00				$ 194.48
	NXC Shoe - Serial # 3S-23852 16.05 x 9.50 ± 42.00				194.48
	NXC Shoe - Serial # 3S-23853 16.05 x 9.50 + 42.00				194.48
	Mileage driven to get materials or put materials on job:				
	2 Round trips from M'boro to jobsite - 760 miles				
	3 Round trips from jobsite to Grossville - 450 miles				
	1 " " " " " Carmi - 135 miles				
	1 " " " " " Marion - 100 miles				
		Total mileage	1445 miles	.35	505.75
	Core boxes (NX size)		300	1.50	450.00
		Total of pages 3 & 4			2,852.30

Gener
1624 Pioneer Road P. O. Box 5
SALT LAKE CITY, UTAH 84
Cable: BOYLESCO
Telex: 388-321

HICKS DOME ACCOUNT
c/o Mr. Joseph Porter
447 62982

Total

1973

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DITIVES

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
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SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001/74546

CE DATE: October 31, 1973
NUMBER: 33-3
NUMBER: 6
NTRACT: HICKS DOME Rosiclare
" TERMS: As per contract
OCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
Page 5

Hole No.	From	To	Footage	Rate	Total
Cut-Out # 19258					
	2 - NXC3 Serial # 3S-12565 & 3S-12566		159'	$ 1.29	$ 205.42
	Less Scrap & Salvage		159'	.85	- 135.15
	Less				70.27
	2 - NXC Serial #3S-28833 & 3S-28834		208'	1.71	355.09
	(Less Scrap & Salvage)		208'	.85	- 176.80
	Less				178.29

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General Offices and Plant
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Cable: BOYLESCO
Telex: 388-321
HICKS DOME ACCOUNT
Joseph Porter

RE DRILLING
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DDITIVES

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Telex: 388-321

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SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: C01774546

E DATE: October 31, 1973
UMBER: 33-3
UMBER: 6
TRACT: HICKS DOME Rosiclare
TERMS: As per contract
CATION: Rosiclare, Ill

HICKS DOME ACCOUNT

e No.	From	To	Footage	Rate	Total
- NXC3 Serial #3S-28842			63'	$ 1.35	$ 84.88
	Less Scrap & Salvage				- 53.55
					31.33
		Less	63'	.85	
- NXC3 Serial # 3S-28841 (Less Scrap & Salvage)			231'	.70	161.43
		Less	231'	.85	- 196.35
					34.92 CR.
NXC3 Serial # 3S-28840 (Less Scrap & Salvage)			32'	5.08	162.66
		Less	32'	.85	- 27.20
					135.46

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cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

DRILLING
CORE DRILLING
DRILLING
ATION TESTING
D DRILLING EQUIPMENT
G ADDITIVES

OICE DATE: October 31, 1973
R NUMBER: 33-3
E NUMBER: 6
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

Hicks Dome Account

Hole No.	From	To	Footage	Rate	Total
Cut-Out #19259					
- NXC Serial #3S-23070			146'	$ .78	$ 113.88
	(Less Scrap & Salvage)				
		Less	146'	.85	- 124.10
					10.22 CR.
- NXC Serial #'s 3S-22759 & 2S-46356			381'	.46	175.26
	(Less Scrap & Salvage)				
		Less	381'	.85	- 323.85
					148.59 CR.

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MEXICO CITY, MEXICO telex: 001774546

DRILLING
LLING
TESTING
ILLING EQUIPMENT
DDITIVES

E DATE: October 31, 1973
UMBER: 33-3
UMBER: 6
TRACT: HICKS DOME Rosiclare
TERMS: As per contract
ATION: Rosiclare , Ill.

HICKS DOME ACCOUNT

le No.	From	To	Footage	Rate	Total
- NXC Serial # 3S-22755			35'	$ 4.77	$ 166.95
	(Less Scrap & Salvage)				- 29.75
		Less	35'	.85	137.20
NXC3 - Serial # 3S-26156			115'	1.60	184.00
	(Less Scrap & Salvage)				
		Less	115'	.85	- 97.75
					86.25
		October Invoice Total - $ 14,540.85			

Abandoned OME-8 (FSB-3)

Date	Set-up Tear Down	Fishing, Cleaning Washing, Advancing	Mix Mud	Casing & Cement	Repair
10-8	8	6			
10-9		19	2		
10-10		21	3		
10-11		4	3	12	8
10-12		14		1	
10-13		8		1	7 (other)
10-15		12	2	2	
10-16		3	3	2	
10-17		8 6 fishing		2	
10-18		10	2	4	
10-19		3 fishing	2	3	
10-20				8 cementing	
10-22		14			
10-23				8 cementing 8	
10-24		8		8	
10-25	4			4	
	12	136	14	87	

34 shifts x 8 = 272 hrs.

249 hours

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rockford Ill. DATE 10-8-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN 8
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) moved drill truck & all equipment to next hole location

DRILLER Carl Lawson HELPER Jerry & Carlson

MACHINE NO. 2711 FOREMAN Carl Lawson

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosalive DATE 10/8/73

SHIFT DAY ____ SWING 8 NITE ____ HOLE NO. ESB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING ____
SET-UP, ~~TEAR DOWN~~ 6
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY 2
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Put in rock bit and 150 ft rods. Laid water line 2 hr.

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN Carl Lemay

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill DATE 10-7-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 6 bags
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR 2
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 6

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Got voltage reg. + put on drill motor, mixed cap. [illegible] to drill rods. Pit down [illegible]

DRILLER Carl Furman HELPER Danny Anderson

MACHINE NO 2412 FOREMAN Carl Furman

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosicrucie DATE 10/9/73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 3 bags
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 5
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 2

CEMENTING _____
EQUIP. REPAIR 1
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) work rig lites
Dis b.t. pulled rods to
block, 7 out.

DRILLER Wayne Thurston HELPER Terrance Lamar

MACHINE NO. 27-9 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10-9-73

SHIFT DAY ____ SWING ____ NITE X HOLE NO. FSB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 9
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) PULLED RODS TO CHECK BIT. LOCKED UP & GETTING BACK DOWN.

DRILLER D. Edwards HELPER L. Vaughn

MACHINE NO. 769 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Bridlane Off DATE 10-10-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

ROD, END OF SHIFT _____ MUD 12 bags

STICKUP, END OF SHIFT _____ TYPE _____

DEPTH, END OF SHIFT _____ CAL-SEAL _____

DEPTH, START OF SHIFT _____ LUMNITE _____

DRILLED _____ PORTLAND _____

CORE RECOVERED _____ ADDITIVES _____

TYPE OF ROCK _____ WATER _____

NUMBER OF RUNS _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ CEMENTING _____

REAMING _____ EQUIP. REPAIR _____

CASING _____ STAND-BY OR SURVEY _____

SET-UP, TEAR DOWN _____ WATER DELAY _____

MIXING MUD _____ WASHING OR CLEANING 8

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled rock bit through core from 140 ft to 236 ft — coal core 3 1/2" Rock bit + 30 ft NX — unable to ring rod in hole, unable to tap through core rod, was 1 hr core, got 6 1/2" & 4 1/2" rock bits.

DRILLER Carl Larson HELPER Sonny Jackson

MACHINE NO. 2767 FOREMAN Carl Larson

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/10/75

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 8 bags
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

~~DRILLING~~ Fishing 5
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 3

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Shrader HELPER Ronnie Joiner
MACHINE NO. 2769 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosicare DATE 10-10-73

SHIFT DAY _____ SWING _____ NITE ✓ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER W. Edwards / E. Edwards HELPER _____

MACHINE NO. 7 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Carlsbad, N.M. DATE 10-11-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. ES3-3

ROD'S, END OF SHIFT _____ MUD _____

STICKUP, END OF SHIFT _____ TYPE _____

DEPTH, END OF SHIFT _____ CAL-SEAL _____

DEPTH, START OF SHIFT _____ LUMNITE _____

DRILLED _____ PORTLAND _____

CORE RECOVERED _____ ADDITIVES _____

TYPE OF ROCK _____ WATER _____

NUMBER OF RUNS _____

FEET CASED 160 FROM 0 TO 160 SIZE NX

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ CEMENTING _____

REAMING _____ EQUIP. REPAIR _____

CASING 4 STAND-BY OR SURVEY _____

SET-UP, TEAR DOWN _____ WATER DELAY _____

MIXING MUD _____ WASHING OR CLEANING 4

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled 4 7/8" rock
I.D. through core from 150 to 230 ft.;
4" Casing Lake 35 1/2 3 x 52 on NX casing;
hole filled up with cave.

DRILLER [illegible] HELPER Tommy Jackson

MACHINE NO. 7167 FOREMAN Carl Kasman

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosicrucie DATE 10/11/73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 30 FROM 160 TO 190 SIZE NX
FEET REAMED 30 FROM 160 TO 190 SIZE NC
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 8
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Stewart HELPER Ronnie Lewis
MACHINE NO. L-749 FOREMAN Carl Thomas

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC Boulder, Ill. DATE 10-12-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR 8
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Purchased plywood + lumber and worked on completion of a 40 x 40 x 8 building in Town of Boulder.

DRILLER Carl Larson HELPER Larry Nelson

MACHINE NO. 2789 FOREMAN Carl Larson

7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 83-3 LOC. Rosedale DATE 10/12/73

SHIFT DAY ____ SWING 8 NITE ____ HOLE NO. ESB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 6
REAMING ____
CASING 1
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR 1
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) changed oil in rig pump pulled casing out of hole

DRILLER Wayne Elwood HELPER Lonnie Turner

MACHINE NO. 2719 FOREMAN Carl Lanier

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10-12-73

SHIFT DAY _____ SWING _____ NITE X HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Don Edwards HELPER D. Jackson

MACHINE NO. 2769 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Boulder, Ill. DATE 10-13-73

SHIFT DAY 8 SWING ____ NITE ____ HOLE NO. FSB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD 12 bags
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING 8

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Drilled 6 inch hole down from 140 ft. to 186 ft.

DRILLER Carl Larson HELPER Larry Jackson

MACHINE NO. 2769 FOREMAN Carl Larson

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10-13-73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____ MUD _____

STICKUP, END OF SHIFT _____ TYPE _____

DEPTH, END OF SHIFT _____ CAL-SEAL _____

DEPTH, START OF SHIFT _____ LUMNITE _____

DRILLED _____ PORTLAND _____

CORE RECOVERED _____ ADDITIVES _____

TYPE OF ROCK _____ WATER _____

NUMBER OF RUNS _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ OTHER ~~CEMENTING~~ 7

REAMING _____ EQUIP. REPAIR _____

CASING 1 STAND-BY OR SURVEY _____

SET-UP, TEAR DOWN _____ WATER DELAY _____

MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Oriskany, Ill. DATE 10-15-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 1 bag
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 174 FROM 0 TO 174 SIZE 4"
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 8

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Put down 174 ft. of 4" pipe; put down 3 3/8" rock bit & drilled through cave & cutting from 174 ft. to 227 ft.

DRILLER Carl Lemons HELPER Glenn & L. Sadler
MACHINE NO. 2767 FOREMAN Carl Lemons

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/10/73

SHIFT DAY ____ SWING 3 NITE ____ HOLE NO. ESB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD 6 bags
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED 75 FROM 174 TO 249 SIZE 4" Pipe
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 4
REAMING ____
CASING 2
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) ____

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 10-16-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 5 bags (100LB.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 336 FROM 0 TO 336 SIZE NX
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 8
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Pulled rods and 3½" rock bit out + started putting NX casing down. Went to Crossville Ill. + got 25 bags (100LB.) drill mud.

DRILLER Carl Lomas HELPER R. Driver + L. Jackson
MACHINE NO. 2769 FOREMAN Carl Lomas

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 83-3 LOC. [illegible] DATE 10/16/73

SHIFT DAY _____ SWING 7 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____

STICKUP, END OF SHIFT _____

DEPTH, END OF SHIFT _____

DEPTH, START OF SHIFT _____

DRILLED _____

CORE RECOVERED _____

TYPE OF ROCK _____

NUMBER OF RUNS _____

MUD 6 bags (100LB.)

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 5

REAMING _____

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD _____

CEMENTING _____

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER [illegible] HELPER [illegible]

MACHINE NO. _____ FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 10-17-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 8 bags (100LB.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 8

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Pulled 336 ft. of casing set it back in the hole. Drilled 2 holes from 70 ft. to 110 ft. Pulled back to top put more 4½ ft. casing in hole.

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 2763 FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB [illegible] LOC. [illegible] DATE [illegible]

SHIFT DAY _____ SWING [illegible] NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 bags (coir.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM 248'11" TO 500'1" SIZE 4 [illegible]
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 2
~~REAMING~~ 7
CASING 2
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 10-18-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSP-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 8

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Fished 3 7/8" rock bit + 10 ft. rods out of hole. Tried to get a bit of 4" pipe down; drilled 3 7/8" rock bit down inside 4" pipe; tried again to get 4" pipe down.

DRILLER Carl Lanier HELPER Leroy Lyell
MACHINE NO. 2762 FOREMAN Carl Lanier

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/18/73

SHIFT DAY ____ SWING 5 NITE ____ HOLE NO. FSB-3

RODS, END OF SHIFT ____ MUD 5 bags (100LB.)

STICKUP, END OF SHIFT ____ TYPE ____

DEPTH, END OF SHIFT ____ CAL-SEAL ____

DEPTH, START OF SHIFT ____ LUMNITE ____

DRILLED ____ PORTLAND ____

CORE RECOVERED ____ ADDITIVES ____

TYPE OF ROCK ____ WATER ____

NUMBER OF RUNS ____

FEET CASED 20 FROM 270 TO 290 SIZE 4" Pipe

FEET REAMED ____ FROM ____ TO ____ SIZE ____

CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 2 CEMENTING ____

REAMING ____ EQUIP. REPAIR ____

CASING 4 STAND-BY OR SURVEY ____

SET-UP, TEAR DOWN ____ WATER DELAY ____

MIXING MUD 2 WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) ____

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 709 FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Carlyle, Ill. DATE 10-19-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 bags (100 lb.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 390 FROM 0 TO 390 SIZE NX
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 8
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Washing hole out below NX casing with 3.75 Rock bit and then washed casing down. Went to Trenville, Ill. + got 25 bags of bell mud.

DRILLER Carl Lamar HELPER Quincy + Lyndon

MACHINE NO. 4767 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 88-3 LOC. [illegible] DATE 12/19/73

SHIFT DAY _____ SWING 2 NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 7 [illegible]
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 50 FROM 30 TO 440 SIZE NA
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 3
REAMING _____
CASING 3
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER [illegible] HELPER [illegible]
MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 32-3 LOC. [illegible] DATE 10-23-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. LSE-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 4 bags (100LB)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 8
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Basic/Ive DATE 10/2/73

SHIFT DAY ____ SWING ✓ NITE ____ HOLE NO. [illegible]

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE 5 bags
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ✓
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Left NC under hole @ 331 ft + cemented in.

DRILLER ✓ HELPER ____

MACHINE NO. ____ FOREMAN ____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Fairlane, Okla. DATE 10-22-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled + reamed out to casing drill to 250 ft. circulate hole clean, dill + put 20 bags of Calseal cement (Cement)

DRILLER Paul Larson HELPER Robinson + Jackson

MACHINE NO. 2769 FOREMAN Paul Larson

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 53-3 LOC. Fesche DATE 10/22/73

SHIFT DAY ____ SWING ✓ NITE ____ HOLE NO. 1 2 3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 7 FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 23-3 LOC. Bayline DATE 10/23/75

SHIFT DAY _____ SWING 5 NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 10-24-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____ MUD _____

STICKUP, END OF SHIFT _____ TYPE _____

DEPTH, END OF SHIFT _____ CAL-SEAL 5 bags

DEPTH, START OF SHIFT _____ LUMNITE _____

DRILLED _____ PORTLAND _____

CORE RECOVERED _____ ADDITIVES _____

TYPE OF ROCK _____ WATER _____

NUMBER OF RUNS _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ CEMENTING _____

REAMING _____ EQUIP. REPAIR _____

CASING _____ STAND-BY OR SURVEY _____

SET-UP, TEAR DOWN _____ WATER DELAY _____

MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 2762 FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-5 LOC. Rosie Lake DATE 10/24/73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. CB-3

RODS, END OF SHIFT _____

STICKUP, END OF SHIFT _____

DEPTH, END OF SHIFT _____

DEPTH, START OF SHIFT _____

DRILLED _____

CORE RECOVERED _____

TYPE OF ROCK _____

NUMBER OF RUNS _____

MUD _____

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 6

~~REAMING~~ 2

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD _____

CEMENTING _____

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled 4½ [illegible] out of [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 709 FOREMAN Carl Farmer

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Boise, Ala. DATE 10-25-70

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 4
SET-UP, TEAR DOWN 4
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Pulled 300 ft NX casing + NC wedge out of hole; pulled 270 ft of 4" pipe out + moved drill up 20 ft. + set up.

DRILLER Carl Lamar HELPER R. Jones + L. Jackson

MACHINE NO. 2769 FOREMAN Carl Lamar

7

Abandoned OME-8 (FSB-3)

Date	Set-up Tear Down	Fishing, Cleaning Washing, Advancing	Mix Mud	Casing & Cement	Repair
10-8	8	6			
10-9		19	2		
10-10		21	3		
10-11		4	3	12	8
10-12		14		1	
10-13		8		1	7 (other)
10-15		12	2	2	
10-16		3	3	2	
10-17		8 6 fishing		2	
10-18		10	2	4	
10-19		3 fishing	2	3	
10-20				8 cementing	
10-22		14			
10-23				8 cementing 8	
10-24		8		8	
10-25	4			4	
	12	136	14	87	

34 shifts x 8 = 272 hrs.

249 hours

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB _____ LOC. _____ DATE _____

SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER _____ HELPER _____

MACHINE NO. _____ FOREMAN _____

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Bridgeport, Ill. DATE 10-26-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 112
STICKUP, END OF SHIFT 0
DEPTH, END OF SHIFT 105
DEPTH, START OF SHIFT 35
DRILLED 70
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 3 bags (100 lb.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilling 6 hrs.
Bit down to 105 feet.

DRILLER Carl Larson HELPER [illegible]
MACHINE NO. 2769 FOREMAN Carl Larson

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB [illegible] LOC. Rosalie DATE 10/24/73

SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. RSE-3

RODS, END OF SHIFT 113
STICKUP, END OF SHIFT 20
DEPTH, END OF SHIFT 126
DEPTH, START OF SHIFT 105
DRILLED 21
CORE RECOVERED 12
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 bags (100 LB.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM 0 TO 105' 1" SIZE 4" pipe
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 5
REAMING _____
CASING 2
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER _____ HELPER _____

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC Rosiclare, Ill. DATE 10-27-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 173
STICKUP, END OF SHIFT 20
DEPTH, END OF SHIFT 146
DEPTH, START OF SHIFT 126
DRILLED 20
CORE RECOVERED 20
TYPE OF ROCK Chert
NUMBER OF RUNS 2

MUD 2 bags (100LB.)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Carl Lemon HELPER Larry Graham

MACHINE NO. 3767 FOREMAN Carl Lemon

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB _____ LOC. _____ DATE _____

SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER _____ HELPER _____

MACHINE NO _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/29/75

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FS3-3

RODS, END OF SHIFT 213

STICKUP, END OF SHIFT 23

DEPTH, END OF SHIFT 183

DEPTH, START OF SHIFT 155

DRILLED 28

CORE RECOVERED 23

TYPE OF ROCK _____

NUMBER OF RUNS 3

MUD _____

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER ✓

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8

REAMING _____

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD _____

CEMENTING _____

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER Bennie Jones

MACHINE NO. 1270 FOREMAN Wayne Edwards

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosalene DATE 10/22/75

SHIFT DAY ____ SWING 8 NITE ____ HOLE NO. ESB-3

RODS, END OF SHIFT 213
STICKUP, END OF SHIFT 1
DEPTH, END OF SHIFT 184
DEPTH, START OF SHIFT 183
DRILLED 1
CORE RECOVERED 1
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 6
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

8

CEMENTING ____
EQUIP. REPAIR 2
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Pulled Rods, Tube broken LATCH. Drilled Core to get to bottom. 2 hrs Equip Repair on pump.

DRILLER D. Edwards HELPER D. Jackson

MACHINE NO. 2769 FOREMAN D. Edwards

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/30/73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 243
STICKUP, END OF SHIFT 22
DEPTH, END OF SHIFT 214
DEPTH, START OF SHIFT 184
DRILLED 30
CORE RECOVERED 30
TYPE OF ROCK _____
NUMBER OF RUNS 4

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER ✓

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER Tommie Jones

MACHINE NO 2769 FOREMAN Wayne Edwards

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/30/73

SHIFT DAY ____ SWING 8 NITE ____ HOLE NO. FSB-3

RODS, END OF SHIFT 243
STICKUP, END OF SHIFT 19
DEPTH, END OF SHIFT 227
DEPTH, START OF SHIFT 214
DRILLED 13
CORE RECOVERED 13
TYPE OF ROCK ____
NUMBER OF RUNS 2

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 8
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

8

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Pulled Rods - Sw. Bit Change 227' Couldn't get back to Bottom

DRILLER R. Edwards HELPER S. Jackson

MACHINE NO. 276-G FOREMAN W. Edwards

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/31/73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 293
STICKUP, END OF SHIFT 14
DEPTH, END OF SHIFT 272
DEPTH, START OF SHIFT 227
DRILLED 45
CORE RECOVERED 27
TYPE OF ROCK _____
NUMBER OF RUNS 4

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER ✓

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER Ronnie Jones

MACHINE NO. 2769 FOREMAN Wayne Edwards

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11/1/73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT 303
STICKUP, END OF SHIFT 19
DEPTH, END OF SHIFT 277
DEPTH, START OF SHIFT 273.5
DRILLED 3.5
CORE RECOVERED 2.5
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD 2 bag
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 6
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

8

after ~~CEMENTING~~ 1
EQUIP. REPAIR 1
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Fixed Bad Thr(2) ~~[illegible]~~ Two wire on light. Pulled rods for bit change. Rods coming out. Tow truck stuck

DRILLER D. Edwards HELPER D. Jackson
MACHINE NO. 2769 FOREMAN W. Edwards

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 10/31/73

SHIFT DAY _____ SWING 4 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 4

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER _____ HELPER Danny Jackson

MACHINE NO. 2769 FOREMAN _____

7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11/1/73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 295

STICKUP, END OF SHIFT 23

DEPTH, END OF SHIFT 273

DEPTH, START OF SHIFT 272

DRILLED 1

CORE RECOVERED 1

TYPE OF ROCK _____

NUMBER OF RUNS 1

MUD _____

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 1

REAMING _____

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD _____

CEMENTING _____

EQUIP. REPAIR 7

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER Ronnie Jones

MACHINE NO. #2769 FOREMAN Wayne Edwards

7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 333 LOC. Rosichave DATE 11/2/73

SHIFT DAY 5 SWING _____ NITE _____ HOLE NO. RSG-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 270 FROM 0 TO 270 SIZE NX
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 1
REAMING _____
CASING 2
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) broke out NC Rods set casing to 270 ft.

DRILLER [illegible] HELPER [illegible]
MACHINE NO. 2769 FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11/3/73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 292
DEPTH, START OF SHIFT 283
DRILLED 9
CORE RECOVERED 2
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER ✓

FEET CASED 10 FROM 270 TO 280 SIZE NX
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 4
REAMING _____
CASING 4
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER Ronnie Jamen
MACHINE NO. 2767 FOREMAN Wayne Edwards

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11/3/73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT 322
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 305
DEPTH, START OF SHIFT 292
DRILLED 13
CORE RECOVERED 7.5
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 10 FROM 280 TO 290 SIZE NX
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 6
REAMING _____
CASING 2
SET-UP, TEAR DOWN _____
MIXING MUD _____

8

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER D. Edwards HELPER D. Jackson

MACHINE NO. 2769 FOREMAN W. Edwards

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 223 LOC. Rosebud DATE 11/5/73

SHIFT DAY 2 SWING _____ NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 314
DEPTH, START OF SHIFT 305
DRILLED 9
CORE RECOVERED 9 1
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 3
REAMING _____
CASING 5
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER [illegible] HELPER [illegible]
MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11-5-73

SHIFT DAY ____ SWING S NITE ____ HOLE NO. FSB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) ____

DRILLER ____ HELPER ____

MACHINE NO. ____ FOREMAN ____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 233 LOC. Rio Blanco DATE 11/6/78

SHIFT DAY ____ SWING ____ NITE ____ HOLE NO. [illegible]

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD 4-50 lb. bags 3-100 lb bags
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING 6
SET-UP, TEAR DOWN ____
MIXING MUD 2

CEMENTING ____
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Changed [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN ____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 23-3 LOC. Rosiclare DATE 11-6-73

SHIFT DAY _____ SWING 3 NITE _____ HOLE NO. [illegible] 3

RODS, END OF SHIFT _____

STICKUP, END OF SHIFT _____

DEPTH, END OF SHIFT _____

DEPTH, START OF SHIFT _____

DRILLED _____

CORE RECOVERED _____

TYPE OF ROCK _____

NUMBER OF RUNS _____

MUD 5 (100 lb)

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 7

REAMING _____

CASING 2

SET-UP, TEAR DOWN _____

MIXING MUD 3

~~CEMENTING~~ OTHER 1

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled [illegible] 1 [illegible] Drilled [illegible] Lines

DRILLER D. Woods HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. [illegible] DATE [illegible]

SHIFT DAY D SWING _____ NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 [illegible]
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 7
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 35-3 LOC. [illegible] DATE 11-7-73

SHIFT DAY _____ SWING 9 NITE _____ HOLE NO. FB3

RODS, END OF SHIFT —
STICKUP, END OF SHIFT —
DEPTH, END OF SHIFT 314'
DEPTH, START OF SHIFT 291'
DRILLED 23
CORE RECOVERED —
TYPE OF ROCK —
NUMBER OF RUNS —

MUD 2 (100lb)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 6
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 2½

CEMENTING _____
EQUIP. REPAIR 5
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drilled from [illegible] Drilled 291 to 314'. Have mixing mud

DRILLER [illegible] HELPER [illegible]

MACHINE NO. 269 FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Pos-Calve DATE 11/7/75

SHIFT DAY 3 SWING _____ NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____

STICKUP, END OF SHIFT _____

DEPTH, END OF SHIFT _____

DEPTH, START OF SHIFT _____

DRILLED _____

CORE RECOVERED _____

TYPE OF ROCK _____

NUMBER OF RUNS _____

MUD 3 bags (100 lb)

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8

REAMING _____

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD _____

CEMENTING _____

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

bits #257

#258 NC

DRILLER [illegible] HELPER [illegible]

MACHINE NO. _____ FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. [illegible] DATE 11-[illegible]-73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD [illegible]
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING ✓
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 1

8

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]
MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 53-5 LOC. [illegible] DATE [illegible]

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. 53-5

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 3 (50lb bags)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 5
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER _____ HELPER _____

MACHINE NO. 7 _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Ros. Clarke DATE 11-9-73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. [illegible]

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 8 (Sand)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 4
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 3

CEMENTING 1
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

Casing shoe 35 34 [illegible]

DRILLER [illegible] HELPER [illegible]
MACHINE NO. [illegible] FOREMAN [illegible]

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 23-3 LOC. Rosebud DATE 11/10/23

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. 23B 5

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 6 (50 lb bags)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING 6
SET-UP, TEAR DOWN _____
MIXING MUD 2

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. _____ FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11-10-73

SHIFT DAY _____ SWING 4 NITE _____ HOLE NO. ESB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 4

4

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) 11 hrs washing & cleaning 11 hrs [illegible] show up.

DRILLER D. Schwark HELPER _____

MACHINE NO. 7 FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 73-3 LOC. Baidoa, Ethi. DATE 11-12-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 bags (50#)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR 4
STAND-BY OR SURVEY _____
WATER DELAY 3
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Unloaded BX equipment & mud off truck; replaced shaft bearings on drill head; tightened up & taped hoses on auto-transmission; set down drill pump; put a new battery on drill motor.

DRILLER Carl Lomax HELPER Ronald Grier

MACHINE NO. 2767 FOREMAN Carl Lomax

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. ROSICLARE DATE 11-12-73

SHIFT DAY ____ SWING 8 NITE ____ HOLE NO. FS B-3

RODS, END OF SHIFT 332
STICKUP, END OF SHIFT 15
DEPTH, END OF SHIFT 310
DEPTH, START OF SHIFT 298
DRILLED 12
CORE RECOVERED 0
TYPE OF ROCK CAVE
NUMBER OF RUNS ____

MUD 6 (50 lbs.) bags
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 4
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD 2

OTHER ~~CEMENTING~~ 2
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) 2 hrs Draining & fixing Pump & lines

DRILLER [illegible] HELPER [illegible]
MACHINE NO. 2767 FOREMAN [illegible]

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosedale DATE 11/12/73

SHIFT DAY _____ SWING _____ NITE 8 HOLE NO. FSB-3

RODS, END OF SHIFT 332
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 315
DEPTH, START OF SHIFT 310
DRILLED 5
CORE RECOVERED 0
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD 3 (50 lb)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 3
~~REAMING~~ Fishing 4
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Drop other tube through bit

DRILLER Wayne Schmidt HELPER Larry Jackson

MACHINE NO. 709 FOREMAN Carl Lamar

7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 11-13-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
~~WATER~~ FISHING DELAY 8
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Trying to fish AX wire-line inner tube & overshot out of hole.

DRILLER Carl Lamar HELPER Ronald Goines

MACHINE NO. 2769 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11-13-73

SHIFT DAY ____ SWING 2 NITE ____ HOLE NO. ESB-3

RODS, END OF SHIFT ____
STICKUP, END OF SHIFT ____
DEPTH, END OF SHIFT ____
DEPTH, START OF SHIFT ____
DRILLED ____
CORE RECOVERED ____
TYPE OF ROCK ____
NUMBER OF RUNS ____

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ____

FEET CASED 315 FROM 0 TO 315 SIZE 8V
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING ____
REAMING ____
CASING 4
SET-UP, TEAR DOWN ____
MIXING MUD ____

CEMENTING 4
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING ____

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) [illegible]

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosecrare DATE 11/13/73

SHIFT DAY _____ SWING _____ NITE 8 HOLE NO. FSG-3

RODS, END OF SHIFT _____

STICKUP, END OF SHIFT _____

DEPTH, END OF SHIFT 333

DEPTH, START OF SHIFT 315

DRILLED 18

CORE RECOVERED 3

TYPE OF ROCK _____

NUMBER OF RUNS 1

MUD 6 (50 lb)

TYPE _____

CAL-SEAL _____

LUMNITE _____

PORTLAND _____

ADDITIVES _____

WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____

FEET REAMED _____ FROM _____ TO _____ SIZE _____

CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 6

REAMING _____

CASING _____

SET-UP, TEAR DOWN _____

MIXING MUD 2

CEMENTING _____

EQUIP. REPAIR _____

STAND-BY OR SURVEY _____

WATER DELAY _____

WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER Wayne Edwards HELPER James Anderson

MACHINE NO. 2269 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill DATE 11-14-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 bags (50#)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 10 FROM 315 TO 325 SIZE BX
FEET REAMED 10 FROM 315 TO 325 SIZE BX
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____
REAMING 2
CASING 2
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR 4
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Coulldn't get on the Tuesday to check deep well pump. Removed a motor and checked bolts and found on deep well pump and power line. Pump is pulling too much amp. on one side.

DRILLER Carl Lamar HELPER _____
MACHINE NO. 276? FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. ROSICLATE DATE 11-14-73

SHIFT DAY _____ SWING 8 NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 360
STICKUP, END OF SHIFT 11
DEPTH, END OF SHIFT 343
DEPTH, START OF SHIFT 333
DRILLED 10
CORE RECOVERED 10
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD 9 (50 Lb) bags
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED 8 FROM 325 TO 333 SIZE BX
FEET REAMED 8 FROM 325 TO 333 SIZE BX
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 3
REAMING 1
CASING 1
SET-UP, TEAR DOWN _____
MIXING MUD 2

CEMENTING _____
EQUIP. REPAIR 1
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Thu working on lights.

DRILLER D Edwards HELPER D Jackson

MACHINE NO. 2709 FOREMAN Carl Lassiar

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 33-3 LOC. Rosiclare DATE 11/14/73

SHIFT DAY _____ SWING _____ NITE 8 HOLE NO. FSB-3

RODS, END OF SHIFT 272
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 355
DEPTH, START OF SHIFT 343
DRILLED 12
CORE RECOVERED 12
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD 2 (50 lb)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 3
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY 4
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Moved rods

DRILLER Wayne Edwards HELPER Sammy Jackson

MACHINE NO. 769 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Rosiclare, Ill. DATE 11-15-73

SHIFT DAY 8 SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 372
STICKUP, END OF SHIFT 6
DEPTH, END OF SHIFT 359
DEPTH, START OF SHIFT 355
DRILLED 4
CORE RECOVERED 4
TYPE OF ROCK Chert
NUMBER OF RUNS 1

MUD 4 bags (50#)
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 2
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD 1

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY 5
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Put back well pump back on auto-transformer.

DRILLER Carl Lamar HELPER Sonny Jackson
MACHINE NO. 2769 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. [illegible] DATE 11-15-73

SHIFT DAY _____ SWING 3 NITE _____ HOLE NO. 55-3

RODS, END OF SHIFT 402
STICKUP, END OF SHIFT 16
DEPTH, END OF SHIFT 385
DEPTH, START OF SHIFT 359
DRILLED 26
CORE RECOVERED 26
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Rig change at 359'

DRILLER [illegible] HELPER [illegible]

MACHINE NO. [illegible] FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 32-3 LOC. [illegible] DATE 1/15/73

SHIFT DAY D SWING _____ NITE S HOLE NO. [illegible]

RODS, END OF SHIFT 432
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 465
DEPTH, START OF SHIFT 435
DRILLED 30
CORE RECOVERED 30
TYPE OF ROCK _____
NUMBER OF RUNS 4

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER ✓

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 8
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) _____

DRILLER [illegible] HELPER [illegible]

MACHINE NO. _____ FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 33-3 LOC. Prichard, Ala. DATE 11-16-73

SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. FSB-3

RODS, END OF SHIFT 452
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 435
DEPTH, START OF SHIFT 415
DRILLED 20
CORE RECOVERED 20
TYPE OF ROCK Chert & lime
NUMBER OF RUNS 2

MUD _____
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER ✓

FEET CASED _____ FROM _____ TO _____ SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING 5
REAMING _____
CASING _____
SET-UP, TEAR DOWN _____
MIXING MUD _____

CEMENTING _____
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY 3
WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Sand-water
pump went out

DRILLER Carl Lamar HELPER [illegible]
MACHINE NO. 2709 FOREMAN Carl Lamar

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 83-3 LOC. Bolivar DATE 11-16-73

SHIFT DAY ____ SWING ✓ NITE ✓ HOLE NO. ESP-3

RODS, END OF SHIFT 512
STICKUP, END OF SHIFT 10
DEPTH, END OF SHIFT 495
DEPTH, START OF SHIFT 435
DRILLED 60
CORE RECOVERED 60
TYPE OF ROCK ____
NUMBER OF RUNS 7

MUD ____
TYPE ____
CAL-SEAL ____
LUMNITE ____
PORTLAND ____
ADDITIVES ____
WATER ✓

FEET CASED ____ FROM ____ TO ____ SIZE ____
FEET REAMED ____ FROM ____ TO ____ SIZE ____
CEMENT DRILLED ____ FROM ____ TO ____

TIME CHARGES

DRILLING 13
REAMING ____
CASING ____
SET-UP, TEAR DOWN ____
MIXING MUD ____

OTHER
CEMENTING 2
EQUIP. REPAIR ____
STAND-BY OR SURVEY ____
WATER DELAY ____
WASHING OR CLEANING 1

BITS AND SHELLS

BIT NO. ____ SIZE & TYPE ____ OVERSIZE ____ ON ____ OFF ____

SHELL NO. ____ TYPE ____ ON ____ OFF ____

BIT CONDITION ____ REASON FOR RETIRING ____

REMARKS (Explain delays and hole condition) Was working on
[illegible]

DRILLER D. Edwards HELPER D Jackson
MACHINE NO. 2769 FOREMAN Carl Lamar

7

FORM 1-1648
MARCH 1968

OME-8 (FSB-3) Completed

PART 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage III

To Supplement
OPERATOR'S MONTHLY VOUCHER

For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $
Gov't. Participation % $

Operator's Name Hicks Dome Account
Address

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
		$		$		$		$
ozing	-	-						
Drilling 0-500	500	2500.00						
Service time hrs.	130	2535.00						
Casing lost	105.1	157.65						
Drill - mud	48.5	266.75						
iamond drilling								
Set-up/initial casing	-	-						
BX 500-1000	500	2850.00						
1000-1500	685	4281.00						
1500-2000	263	1788.00						
Casing shoes	3	583.44						
Reaming	3	67.50						
Inst. & remove casing	-	-						
Standby	3	56.25						
Cement (hole stablization)	60	1170.00						
Wedge	1	230.63						
Lost, dam. casing	110	319.00						
		16,805.22						
TOTALS		$		$		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee _____

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____
OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

See attached sheet for footnotes

PART 3 - OME-8 (FSB-3)

1. Section of hole charged at rate of $5/ft., per contract.

2. Due to considerable difficulties, the following hours were required for items other than drilling.

45 hrs.	fishing, washing & reaming
25 hrs.	mixing mud
60 hrs.	casing hole

130 hrs. x $19.50 = $2,535.00

These items are not broken down on the invoice. Above figures were taken off daily shift reports. Copies are attached.

3. Excess casing was purchased and put into stock on the property. This casing was used.

4. Would be included in 2 above.

5. A cavity was encountered which ultimately caused a twist off. Considerable effort was made to fish out the tools. Efforts were unsuccessful making it necessary to wedge the hole and redrill past the cavity and lost tools. Since the hole was reduced to BX at 333, further reduction was impractical.

6. Three NX casing shoes were used in setting casing and reaming NX casing throughout cavities in upper part of hole.

7. Considered as part of drilling in upper part of hole, 2 above.

8. See note 5. Considered part of hole stabilization and recovery due to bad ground. It was decided cementing of the cavity would be impractical. This was necessary to complete the hole. Billed at $22.50, charged here at $19.50, per contract.

See Boyles Invoice 33-3 Dec. 22, 1972 5th item. Reduced to 60 hrs at $19.50/hr.

9. Rods lost and casing damaged due to cavities.

Nov.	20'@	$ 2.90	=	$ 58.00	
Dec.	30'@	3.276	=	92.28	98.28
Dec.	60'@	2.94	=	176.88	176.40
				$ 327.16	332.68

Charged at 110'@ $2.90/ft. = $319.00, per contract.

CORE DRILLING
DRILLING
NG
TION TESTING
D DRILLING EQUIPMENT
G ADDITIVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

OICE DATE: November 30, 1973
R NUMBER: 33-3
CE NUMBER: 7
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
c/o Mr. Joseph Porter
P.O. Box 447
Rosiclare, Ill. 62982

Hole No.	From	To	Footage	Rate	Total
FSB-3 (DME-8)	Drilling and casing top section of hole:				
	Nov. 1 thru Nov. 3		48 hrs.	$ 19.50	$ 936.00
	Nov. 5 thru Nov. 10		92 hrs.	19.50	1,794.00
	Nov. 12 thru Nov. 14 Day shift		54 hrs.	19.50	1,053.00
	333	1000	667	5.70	3,801.90
	1000	1167	167	6.25	1,043.75 ✓
	Reaming		3 hrs.	22.50	67.50 ✓
	Mixing mud		3 hrs.	19.50	58.50
	Drill mud used 100# bags		20	5.50	110.00 ✓
	50# bags		57	2.75	156.75 ✓
	NX casing damaged		20 ft.	2.90	58.00 ✓

CERTIFIED TRUE COPY

RE DRILLING
DRILLING
ING
ATION TESTING
ND DRILLING EQUIPMENT
NG ADDITIVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
Cable: BOYLESBROS
LIMA, PERU
Cable: BOYLESCOP
MEXICO CITY, MEXICO
Telex: 021-774545

VOICE DATE: November 30, 1973
ER NUMBER: 33-3
CE NUMBER: 7
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT

Page 2

Hole No.	From	To	Footage	Rate	Total
(OME-8) FSB-3 Cont.	2 - 2 15/16" Rock bits			$ 55.11	$ 110.22
	Mileage on round trip from M'boro to Rosiclare, Ill.		380 mi.	.35	133.00
Bit #'s	3S-40745	(15.53 wt. x 9.50 + 42.00)			189.54
	3S-40748	(15.54 wt. x 9.50 + 42.00)			189.63
	3S-40750	" " " "			189.63
	3S-40752	" " " "			189.63
					10,081.05

RE DRILLING
ILLING

N TESTING
RILLING EQUIPMENT
DDITIVES

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

CE DATE: November 30, 1973
NUMBER: 33-3
NUMBER: 7
NTRACT: HICKS DOME Rosiclare
TERMS: As per contract
OCATION: Rosiclare, Ill.

HICKS DOME Rosiclare
Page 3

Hole No.	From	To	Footage	Rate	Total
Cut-Out #19260					
1 NXC3 #3S-28837		(less Scrap & salvage)	369'	.28	$ 105.02
		Less	369'	.85	- 313.65
					208.63 CR.
1 NXC #2S-29606		(less Scrape & salvage)	93'	.92	85.61
		Less	93'	.85	- 79.05
					6.56
1 NXC #3S-23071		(less Scrap & salvage)	197'	.51	100.21
		Less	197'	.85	- 167.45
					67.24 CR.

RE DRILLING
LLING

N TESTING
RILLING EQUIPMENT
DDITIVES

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388 321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

CE DATE: November 30, 1973
NUMBER: 33-3
NUMBER: 7
NTRACT: HICKS DOME Rosiclare
TERMS: As per contract
OCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
Page 4

Hole No.	From	To	Footage	Rate	Total
	All for OME-6				
1 NXC3	#2S-29607	(Less Scrap & salvage)	155'	.85	$ 131.54
		Less	155'	.85	- 131.74
					.20 CR.
2 NXC3	#3S-22754 & 3S-22760	(less Scrap & salvage)	152'	1.11	168.23
		Less	152'	.85	- 129.20
					39.03 CR.
1 NXC	#3S-16040	(Less Scrap & salvage)	188'	.50	93.50
			188'	.85	- 159.80
					66.28 CR.

RILLING
G

STING
NG EQUIPMENT
IVES

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

DATE: November 30, 1973
MBER: 33-3
MBER: 7
RACT: HICKS DOME Rosiclare
ERMS: As per contract
ATION: Rosiclare, Ill.

HICKS DOME ROSICLAIR

Page 5

le No.	From	To	Footage	Rate	Total
NXC3 #3S-28552		(less scrap & salvage)	113'	.82	$ 92.67
			113'	.85	- 96.05
					3.38 CR.

November Invoice Total $ 9,702.85

MOND CORE DRILLING
ARY DRILLING
UTING
NDATION TESTING
MOND DRILLING EQUIPMENT
LLING ADDITIVES

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001 774546

INVOICE DATE: December 22, 1973
ORDER NUMBER: 33-3
INVOICE NUMBER:
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Illinois

HICKS DOME ACCOUNT
% MR. Joseph Porter
P.O. Box 447
Rosiclare, Illinois 62982

Hole No.	From	To	Footage	Rate	Total
FSB-3 OMc-8	1167	1450	283	$ 6.25	$ 1768.75
	1265	1500	235	6.25	1468.75
	1500	1763	263	6.80	1788.40
	Delay--Waiting on decision of cavity		3 hrs.	18.75	56.25
	Fishing for tools, plugging and wedging		60 hrs.	22.50	1350.00
	Wedge				230.63
	Core boxes		225	1.50	337.50
	Mileage on round trips from Mlboro to Rosiclare, Ill.		1240	.35	434.00
	Rods damaged or lost in hole		3-10 ft.	32.76	98.28
			3-20 ft.	58.96 (?)	176.88
			November	invoice Total	$ 7,709.44

CERTIFIED TRUE COPY

OME-9 (Hamp 8)

PART 4

To Supplement

OPERATOR'S MONTHLY VOUCHER

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage III

For Month of Sept., Oct., Nov., Dec. 1973

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $

Gov't. Participation % $

Operator's Name Hicks Dome Account

Address

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (1)		$		$		$		$
1 Dozing, hours	10	125.00						
2 Rotary - Demobil.	½	175.00						
Drilling feet	677	2708.00						
Casing feet	84	126.00						
Coring Mobil	½	400.00						
3 Set-up/casing	17	331.50						
Drilling NX 500-1000	324	1603.80						
1000-1500	457.7	2517.35						
BX 1000-1500	42.3	219.96						
1500-2000	500	2975.00						
2000-2500	141	937.65						
4 Install/remove casing	10	195.00						
		12,314.26						
TOTALS		$		$		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee _____

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example, "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit

Signature _____ OME Field Officer Date

Approved for: $ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____ (SEE OTHER SIDE)

See attached sheet for footnotes.

Site preparation done in September for air rotary drill.

One-half was charged for Stage II.

Because of cavities considerable difficulty was encountered in
tting the 3" casing in the rotary hole. Caving material from
vities causedseveral twist offs. A total of 176.5 hours at $25.00
r hour was required at a total cost of $4,412.50. Claimed here is
hours (1/4 allowed in the contract) at $19.50, per OME contract.

3 above applicable, partially applied here. Billed at $25/hr.,
harged here at $19.50/hr., per contract.

Phone: Area Code 618
Office 382-4184

P. O. Box 389
Carmi, Illinois 62821

In Account With

DiKor

a division of scw-for.inc.

TO

Hick's Dome Project
P.O. Box 506
Rosiclare, Illinois 62982

Date 9/30/73

Invoice Number 30-211- 6

Delivery Ticket

Lease #5
item # 8
(OME-9)

TERMS: 30 Days Net.

Part No.	Description	Unit Price	Amount
	Second 1/2 of Mobilization & Demobilization		$ 175.00
	Drilled	677' @ $4.00/ft	2708.00
	Casing - 7" - Lost in hole	84' @ $1.50/ft	126.00
	Company Time		- 0 -
	Sales Tax on $126.00 - 5% Ill. R.U. Tax		6.30
		Total Invoice	$ 3015.30
		Illinois Delivery	

CERTIFIED TRUE COPY

TRUE COPY INVOICE

SPRAGUE & HENWOOD, Inc.

SCRANTON 2, PA., U. S. A.

C14949

ADDRESS ALL COMMUNICATIONS
TO MAIN OFFICE
BOX 446
SCRANTON 2, PA.

CONTRACTORS FOR
DIAMOND DRILLING
SHOT DRILLING - SOIL SAMPLING - PRESSURE GROUTING
WATER WELLS & CHURN DRILLING

CH-077-002

Hicks Dome Account
Hicks Dome, Illinois

LOCATION Hicks Dome, Illinois

OME-9 (Hamp 8)

VIA.

DATE	INVOICE NO.	YOUR ORDER NO.	ORDER DATE	TERMS: NET CASH 10 days NO DISCOUNT ALLOWED	CONT. NO.	ENTERED BY:
73	99727				19,034	

DESCRIPTION

Charge account for NXW/L drilling at the above mentioned site in the period ber 25, 1973 to November 30, 1973 -

1 - Mobilization and demobilization - Lump sum - $800.00 @ 50% .....$ 400.00

2 - Core drilling (NXW/L) - OME-9
Hole No. 8 - Not completed - Depth 1,278'
676' to 1,000' - 324' @ $4.95/L.F.....$1,603.00
1,000' to 1,278' - 278' @ $5.50/L.F.....$1,529.00

4 - Moving between sites, setting casing and cleaning out holes previously drilled by others - (per attached sheet) -
176½ hrs. @ $25.00/hr.....$4,412.50

TOTAL AMOUNT DUE THIS INVOICE.....$7,945.30

CERTIFIED TRUE COPY

UE & HENWOOD, INC.

SECOND SHEET TRIPLICATE INVOICE

Dome Account
est No. 15,834
ce No. 99727

DATE	DRILLER'S NAME	HOURS
10/25/73	S. Grathler	5
10/26/73	S. Grathler	6
10/29/73	S. Grathler	9
10/30/73	S. Grathler	2½
11/01/73	S. Grathler	10
11/01/73	A. Austin	8
11/02/73	S. Grathler	10
11/02/73	A. Austin	8
11/03/73	A. Austin	8
11/05/73	S. Grathler	10
11/06/73	S. Grathler	10
11/06/73	A. Austin	10
11/07/73	S. Grathler	10
11/07/73	A. Austin	10
11/08/73	S. Grathler	10
11/08/73	A. Austin	10
11/09/73	S. Grathler	10
11/09/73	A. Austin	10
11/12/73	S. Grathler	10
11/12/73	A. Austin	10
		176½

INVOICE

SPRAGUE & HENWOOD, Inc.

SCRANTON 2, PA., U. S. A.

C 15122

DRESS ALL COMMUNICATIONS
TO MAIN OFFICE
BOX 446
SCRANTON 2, PA.

CORRECTED INVOICE

CH-077-002

CONTRACTORS FOR
DIAMOND DRILLING
SHOT DRILLING - SOIL SAMPLING - PRESSURE GROUTING
WATER WELLS & CHURN DRILLING

Hicks Dome Account
Hicks Dome, Illinois

LOCATION: Hicks Dome, Illinois
OME-9 (Hamp 8)

VIA.

DATE	INVOICE NO.	YOUR ORDER NO.	ORDER DATE	TERMS:	CONT. NO.	ENTERED BY:
73	99784			10 days NET CASH NO DISCOUNT ALLOWED	15,884	

DESCRIPTION

ge account for NXW/L-BXW/L drilling at the above mentioned site in the period
er 1, 1973 to December 31, 1973 -

9
o. 8 - Not completed, depth 2,141'

- Core drilling -

- 1,278.0' to 1,457.7'	- 179.7'	@ $5.50/L.F.		$ 988.35
- 1,457.7' to 1,500.0'	- 42.3'	@ $5.20/L.F.		$ 219.96
1,500.0' to 2,000.0'	- 500.0'	@ $5.95/L.F.		$2,975.00
2,000.0' to 2,141.0'	- 141.0'	@ $6.65/L.F.		$ 937.65

TOTAL AMOUNT DUE THIS INVOICE.....$5,120.96

CERTIFIED TRUE COPY

MARCH 1968

Part 3

To Supplement

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage III

OPERATOR'S MONTHLY VOUCHER

For Month of Sept., Oct., Nov., Dec 1973

*Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $

Gov't. Participation % $

Operator's Name Hicks Dome Account

Address

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
		$		$		$		$
Category (2)								
Geologist-Supervisor	3	4200.00						
1 Assist.-Geologist	1	700.00						
2 Sampler	2	247.57						
Category (3)								
3 Core boxes	342	427.50						
Category (7)								
4 Secretarial	3	450.00						
		6025.07						
TOTALS		$		$		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee _____

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

See attached sheet for footnotes.

An experienced assistant geologist was not availabe. An experienced on tempory basis was contracted for from Resource Exploration of Marquette, Michigan. Rate was $70/day plus expenses. Billing was:

11/26 to 12/7	=	$ 796.20
12/8 to 12/20		924.56
Total		$1720.76

Claimed here is one month at $700.00, percontract.

2. Helper-sampler was used to bring in core from the rigs and haul and stack core. Charged here at amount paid plus social security.

consider as same item as per contract

3. Charged as used from inventory. These are furnished by Boyles and are shown on page 4 of October invoice (300 @ $450.00) and page 1 of December invoice (225 @ $337.50).

4. Due to increased volume of work secretarial work was essentially full time. Total earned in this period was $948.00. Charged at $150.00, amount allowed by contract.

TRAIN CABOT INC

000243015

EARNINGS	HOURS	AMOUNT	DEDUCTIONS					
REGULAR		75000	FED. TAX	11267	STATE TX	1458		
			GRP INS	1057				

CERTIFIED TRUE COPY

YEAR TO DATE	
GROSS PAY	1235000
F.I.C.A.	63180
FED. TAX	181939
STATE TAX	23786

FOR PERIOD ENDING
09-15-73

NET PAY
612.18

TOTAL EARNINGS 75000 TOTAL DEDUCTIONS 13782

1. JOSEPH A PORTER 501 1 020 00044 NON-NEGOTIABLE

5755
MM 2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

TRAIN CABOT INC

000290476

EARNINGS	HOURS	AMOUNT	DEDUCTIONS			
REGULAR		75000	FED. TAX	11267	STATE TX	1458
			GRP INS	1057		
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS			13782

YEAR TO DATE	
GROSS PAY	1310000
F.I.C.A.	63180
FED. TAX	193206
STATE TAX	25244

FOR PERIOD ENDING
09-30-73

NET PAY
612.18

JOSEPH A PORTER

501 1 020 00044

NON-NEGOTIABLE

-73

STATEMENT OF EARNINGS AND DEDUCTIONS

EARNINGS	HOURS	AMOUNT	DEDUCTIONS				YEAR TO DATE	
REGULAR		75000	FED. TAX	11267	STATE TX	1458	GROSS PAY	1385000
			GRP INS	1057			F.I.C.A.	63180
							FED. TAX	204473
							STATE TAX	26702
							FOR PERIOD ENDING	
							10-15-73	
							NET PAY	
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS			13782	612.18	

JOSEPH A PORTER 501 1 020 00044 NON-NEGOTIABLE

2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

STATEMENT OF EARNINGS AND DEDUCTIONS

TRAIN CABOT INC

000395400

EARNINGS	HOURS	AMOUNT	DEDUCTIONS				YEAR TO DATE	
REGULAR		75000	FED. TAX	11267	STATE TX	1458	GROSS PAY	1460000
			GRP INS	1057			F.I.C.A.	63180
							FED. TAX	215740
							STATE TAX	28160
							FOR PERIOD ENDING	10-31-73
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS			13782	NET PAY	612.18

JOSEPH A PORTER 501 1 020 00044 NON-NEGOTIABLE

S
2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

000449575

TRAIN CABOT INC

EARNINGS	HOURS	AMOUNT	DEDUCTIONS					
REGULAR		75000	FED. TAX	11267	STATE TX	1458		
			GRP INS	1057				

YEAR TO DATE	
GROSS PAY	1535000
F.I.C.A.	63180
FED TAX	227007
STATE TAX	29618

FOR PERIOD ENDING 11-15-73

NET PAY 612.18

TOTAL EARNINGS 75000 TOTAL DEDUCTIONS 13782

JOSEPH A PORTER 501 1 020 00044 NON-NEGOTIABLE

155
1 2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

TRAIN CABOT INC

000502009

EARNINGS	HOURS	AMOUNT	DEDUCTIONS				YEAR TO DATE	
REGULAR		75000	FED. TAX	11267	STATE TX	1458	GROSS PAY	161000
			GRP INS	1057			F.I.C.A.	63180
							FED. TAX	238274
							STATE TAX	31076
							FOR PERIOD ENDING	11-30-73
							NET PAY	612.18
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS			13782		

JOSEPH A PORTER 501 1 020 00044 NON-NEGOTIABLE

5755
MM 2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

TRAIN CABOT INC

000556710

EARNINGS	HOURS	AMOUNT	DEDUCTIONS						YEAR TO DATE	
REGULAR		75000	FED. TAX	11267	STATE TX	1458			GROSS PAY	168[illegible]
			GRP INS	1057					F.I.C.A.	63[illegible]
									FED. TAX	249[illegible]
									STATE TAX	32[illegible]
									FOR PERIOD ENDING	
									12-14-7	
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS				13782		NET PAY	612.1[illegible]

JOSEPH A PORTER

501 1 020 00044

NON-NEGOTIABLE

755
M 2-73

STATEMENT OF EARNINGS AND DEDUCTIONS

TRAIN CABOT INC

00060604

EARNINGS	HOURS	AMOUNT	DEDUCTIONS					
REGULAR		75000	FED. TAX	11267	STATE TX	1458		
			GRP INS	1057				
TOTAL EARNINGS		75000	TOTAL DEDUCTIONS				13782	

YEAR TO DATE	
GROSS PAY	1760000
F.I.C.A.	63180
FED TAX	260808
STATE TAX	33992

FOR PERIOD ENDING 12-28-73

NET PAY 612.18

JOSEPH A PORTER

501 1 020 00044

NON-NEGOTIABLE

STATEMENT OF EARNINGS AND DEDUCTIONS

5755
M 2-73

Phone (906) 226-7541

Resource Exploration, Inc.

Longyear Building
Marquette, Michigan 49855

December 12, 1973

BILLING
FOR SERVICES RENDERED

To: J. A. Porter
Hicks Dome Account
Box 477
Rosiclare, Illinois 62982

For: Personal services of Mr. James Hanttula for the period 11-26-73 to 12-7-73, per letter of Resource Exploration, Inc., dated 11-6-73.

Item	
Labor - 9 days	$630.00
Meals	101.10
Lodging	31.30
Transportation	162.16
Balance due	$924.56

Willard A. Bidwell
President

Paid 12-[illegible] H
226

CERTIFIED TRUE COPY

James Porter

Pay from HDA

Phone (906) 226-7541

Resource Exploration, Inc.

Longyear Building
Marquette, Michigan 49855

December 31, 1973

BILLING
FOR SERVICES RENDERED

To: J. A. Porter
Hicks Dome Account
Box 477
Rosiclare, Illinois 62982

For: Personal services of Mr. James Hanttula for the period 12-8-73 to 12-20-73 inclusive; per letter of Resources Exploration, Inc., dated 11-6-73.

Item	
Labor 9½ days	$665.00
Meals	87.40
Lodging	30.00
Transportation	9.00
Miscellaneous	4.80
Balance due	$796.20

Wilfred G. Bidwell
President

pd 1/10/74
ck 233

CERTIFIED TRUE COPY

FEASIBILITY STUDIES

Phone (618) 225-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois
62982

November 29, 1973

Mr. Roy A. Stacey
Rural Route
Elizabethtown, IL

Dear Roy:

Enclosed find a check in the amount of $93.21 representing wages earned for the month of November 1973. Amount due was calculated as follows:

44 hrs. x $2.25		=	$ 99.00
State Tax	0.00		
Income Tax	0.00		
Social S.	5.79		- 5.79
			$ 93.21

Sincerely,

Joseph A. Porter

Total 99.00
S.S. 5.79
Check one $ 104.79

JAP:kt
Encl. 1

CERTIFIED TRUE COPY

RECORD OF TIME WORKED

P. A. Stacey — November

Name, S. S. No., Dependents — Month

Day - Date	Start Work	Stop Work	Hrs. Worked	Overtime	Remarks
15-73			3 hrs		haul cars
16-73			2 hrs		" "
17-73			4 hrs		cars to house
19-73			8 hrs		north end pump
20-73			8 hrs		laid tracks cars to house
22-73			7 hrs		take cars from
24-73			4 hrs		cars from Bitterville
26-73			4 hrs		cars to house
28-73			4 hrs		cars from Bitterville to house
			44		

Box 447

Phone (618) 285-6683

Joseph A. Porter

Geologist

Rosiclare, Illinois

62982

December 28, 1973

Mr. Roy Stacey
Rural Route
Elizabethtown, IL

Dear Roy:

Enclosed find a check in the amount of $127.10 repre- wages earned for the month of December 1973. Amount due was calculated as follows:

60 hrs. x $2.25		$ 135.00
State Tax	$ 0.00	
Income Tax	0.00	
Social Security	7.90	7.90
		$ 127.10

Sincerely,

Joseph A. Porter

Total $ 135.00
7.83
UMC 142.83

JAP:mt
Enc. 1

CERTIFIED TRUE COPY

Joseph A. Porter

RECORD OF TIME WORKED

Roy A Stacey — December

Name, S. S. No., Dependents — Month

Day - Date	Start Work	Stop Work	Hrs. Worked	Overtime	Remarks
1-30-73			4 hrs		Carts Feedlot
2-3-73			6 hrs		Cares to house 2 wells work on pump
2-5-73			4 hrs		Cares to Rice Store
2-7-73			4 hrs		Cares to house to repair
2-11 73			8 hrs		Cares to Rice Store & Susan
2-13-73			4 hrs		Cares to Rice Store
2-14-73			2 hrs		Move pump with tractor
2-15-73			2 hrs		pulled Carcass to tractor
2-17-73			2 hrs		Cares from Hill
12-18-73			8 hrs		Cares to Rice Store
12-19-73			4 hrs		Cares to Rice Store
12-22-73			4 hrs		Cares to house
12-27-73			4 hrs		" "
12-31-73			4 hrs		cares to Rice Store
Paid	Roy	Stacey			

October 15, 1973

Mrs. Ray Thornberry
Rosiclare
Illinois

Dear Ray:

Enclosed find a check in the amount of $139.55 representing wages earned October 1 thru 15, 1973. Amount due was calculated as follows:

81 hrs. x $2.00 =		$ 162.00
S.T.	$ 1.97	
I.T.	11.00	
S.S.	9.48	- 22.45
		$ 139.55

Sincerely,

Joseph A. Porter

CERTIFIED TRUE COPY

Joseph A. Porter

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois

62982

October 26, 1973

Mrs. Kay Thornberry
Rosiclare
Illinois

Dear Kay:

Enclosed find a check in the amount of $122.44 representing wages earned October 16 thru 26, 1973. Amount due was calculated as follows:

70 hrs. x $2.00 =		$ 140.00
I.T.	$ 7.90	
S.S.	8.19	
S.T.	1.47	- 17.56
		$ 122.44

Sincerely,

Joseph A. Porter

RECORD OF TIME WORKED

Kay Throckmorton 330-44-2095 2 — October 1973

Name, S. S. No., Dependents — Month

Day - Date	Start Work	Stop Work	Hrs. Worked	Overtime	Remarks
10-1	8:00	4:30	8		HDA
10-2	8:00	4:30	8		"
10-3	8:00	4:30	8		"
10-4	8:00	4:30	8		"
10-5	8:00	4:30	8		"
10-8	9:00	12:00	3		"
10-9	8:00	4:30	8		"
10-10	8:00	4:30	8		"
10-11	8:00	4:30	8		"
10-12	10:00	4:30	6		"
10-15	8:00	4:30	8		"
			81		
10-16	8:00	4:30	8		HDA B 45 min
10-17	8:00	4:30	8		HDA
10-18	8:00	4:30	8		HDA
10-19	8:00	~~3:30~~ 4:30	8~~7~~		HDA
10-22	8:00	4:30	8		"
10-23	8:00	4:00	7½		"
10-24	8:00	4:30	8		"
10-25	8:00	3:00	6½		"
10-26	8:00	7:30	8		
~~10-29~~			70		
~~10-30~~					
~~10-31~~					

x 447

Phone (618) 285-6683

Joseph A. Porter

Geologist

Rosiclare, Illinois

62982

November 15, 1973

Mrs. Kay Thornberry
P.O. Box 444
Rosiclare, IL 62982

Dear Kay:

Enclosed find a check in the amount of $167.43 representing wages earned November 1 thru 15, 1973. This also includes the last three days in October. Amount due was calculated as follows:

100 hrs. x $2.00 =		$ 200.00
S.T.	$ 2.97	
I.T.	17.90	
S.S.	11.70	- 32.57
		$ 167.43

Sincerely,

Joseph A. Porter

CERTIFIED TRUE COPY

Joseph A. Porter

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois

62982

November 30, 1973

Mrs. Kay Thornberry
P.O. Box 444
Rosiclare, IL 62982

Dear Kay:

Enclosed find a check in the amount of $147.76 representing wages earned November 16 thru 30, 1973. Amount due was calculated as follows:

86½ hrs. x $2.00 =			$ 173.00
S.T.	$ 2.22		
I.T.	12.90		
S.S.	10.12		- 25.24
			$ 147.76

Sincerely,

Joseph A. Porter

RECORD OF TIME WORKED

/ Thornberry 330-44-2095 / 2
me, S. S. No. Dependents

November 1973
Month

y - Date	Start Work	Stop Work	Hrs. Worked	Overtime	Remarks
-29	8:00	4:30	8		HDA
-30	8:00	4:30	8		HDA
-31	8:00	4:30	8		HDA
-1	8:00	4:30	8		HDA
-2	8:00	4:30	8		HDA
-5	8:00	4:30	8		HDA
-6	12:30	4:30	4		HDA
-7	8:00	4:30	8		HDA
-8	8:00	4:30	8		HDA
-9	8:00	12:00	4		HDA
-12	8:00	4:30	8		HDA
-13	8:00	12:00	4		HDA
-14	8:00	4:30	8		HDA
-15	8:00	4:30	8		HDA
			100		
-16	8:00	3:30	7		HDA
-17	Trip to Paducah				HDA
-19	8:00	4:30	8	Paducah	HDA
-20	8:00	4:30	8		HDA
-21	8:00	4:30	8	Paducah	HDA
-22	Thanksgiving		8		
-23	8:00	4:00	7½		HDA
-26	8:00	4:30	8	Marion	HDA
-27	8:00	4:30	8		HDA
-28	8:00	4:30	8		
-29	8:00	4:30	8		
-30	8:00	4:30	8		

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois

62982

December 28, 1973

Mrs. Ray Thornberry
Rosiclare
Illinois

Dear Ray:

Enclosed find a check in the amount of $121.82 representing wages earned Dec. 16 thru Dec. 28, 1973. Included in tax deductions is $25.00 for X-Mas bonus; paid by separate check but figured in calculation here.

73½ hrs. x $2.00 =		$ 147.00
Christmas Bonus		25.00
		$ 172.00
S.T.	$ 2.22	
I.T.	12.90	
F.T.	10.06	- 25.18
		$ 146.82
		- 25.00
		$ 121.82

Sincerely,

Joseph A. Porter

CERTIFIED TRUE COPY

Joseph A. Porter

December 14, 1973

Mrs. Kay Thornberry
P.O. Box 444
Rosiclare, IL 62982

Dear Kay:

Enclosed find a check in the amount of $111.83 representing wages earned December 1 thru 15, 1973. Amount due was calculated as follows:

63 hrs. x $2.00 =		$ 126.00
S.T.	$ 1.10	
I.T.	5.70	
S.S.	7.37	- 14.17
		$ 111.83

Sincerely,

Joseph A. Porter

RECORD OF TIME WORKED

K. Thornburg 330-44-2095 2
Name, S. S. No., Dependents

December 1973
Month

Day - Date	Start Work	Stop Work	Hrs. Worked	Overtime	Remarks
12-3	8:00 12:30	9:00 4:30	5		
12-4	8:00	9:00	1		
12-5	8:00	4:30	8		HDA
12-6	8:00	9:00 ~~4:30~~	~~8~~ 1		HDA
12-7	8:00	4:30	8		HDA
12-10	8:00	4:30	8		HDA
12-11	8:00	4:30	8		HDA Ohio
12-12	8:00	4:30	8		HDA Flyer
12-13	8:00	4:30	8		HDA Flyer
12-14	8:00	4:30	8		HDA
			63		
12-15	9:00	11:00	2		Flyer Cash
12-17	8:00	4:30	8		HDA
12-18	8:00	4:30	8		Flyer Cash
12-19	8:00	4:30	8		F.C
12-20	8:30	3:30	6½		HDA & F.C.
12-21	8:00	4:30	8		HDA
12-24	8:00	9:00	1		HDA
12-25	X-MAS		8		
12-26	8:00	4:30	8		
12-27	8:00	4:30	8		
12-28	8:00	4:30	8		
12-31					
			73½		
-Mas bonus.					

MARCH 1968

DEP[redacted] THE INTERIOR
[redacted]ICAL SURVEY
OFFICE [redacted] MINERALS EXPLORATION

PART I

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount ~~$56,450~~ 114,180
Gov't. Participation ~~35% $19,768~~ 50% 57,0[illegible]

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.
Address Shearman and Sterling, 53 Wall St. New York, NY 10005

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (1)		$		$		$		$
Dozing, hours	20	250.00	20	250.00	20	250.00	20	250.00
Rotary demobil.	½	175.00	½	175.00	0.5	175.00	0.5	175.00
Drilling	1937	8248.00	1937	8248.00	1937	8248.00	1937	8248.00
Service time	380	7435.00	380	7435.00	380	7435.00	380	7435.00
Mud & cement	139.5	825.96	139.5	825.96	194	825.95	194	825.95
Casing, surface	296.6	444.90	296.6	444.90	296.6	444.90	296.6	444.90
Core drilling, mobil	½	400.00	½	400.00	0.5	400.00	0.5	400.00
Set-up/casing	29	565.50	29	565.50	29	565.50	29	565.50
NX 500-1000	324	1603.80	324	1603.80	324	1,603.80	324	1,603.80
1000-1500	457.7	2517.35	457.7	2517.35	457.5	2517.35	457.7	2517.35
BX 500-1000	500	2850.00	500	2850.00	500	2850.00	500	2850.00
1000-1500	727.3	4500.96	727.3	4500.96	727.3	4500.96	727.3	4500.96
1500-2000	763	4763.00	763	4763.00	763	4763.00	763	4763.00
2000-2500	141	937.65	141	937.65	141	937.65	141	937.65
Casing shoes	3	583.44	3	583.44	3	583.44	3	583.44
Reaming, hours	3	67.50	3	67.50	3	67.50	3	67.50
Inst./remove casing	10	195.00	10	195.00	10	195.00	10	195.00
Standby	3	56.25	3	56.25	3 hr.	56.25	3 hr.	56.25
Cement (hole stab.)	60	1170.00	60	1170.00	60 hr.	1170.00	60	1170.00
Wedge	1	230.63	1	230.63	1	230.63	1	230.63
Lost, damg. casing	110	319.00	110	319.00	110	319.00	110	319.00
Category (2)								
Geologist-Supervisor	3	4200.00	3	4200.00	3 mo.	4,200.00	3 mo.	4,200.00
Assistant Geologist	1	700.00	1	700.00	1 mo.	700.00	1 mo.	700.00
Sampler	2	247.57	2	247.57	2 mo	247.57	2 mo	247.57
Category (3)								
Core boxes	342	427.50	342	427.50	342	427.50	342	427.50
Category (7)								
Office-secretarial	3	450.00	3	450.00	3 mo.	450.00	3 mo.	450.00
Totals	Stage III (allowable at 50%)					44,164.00		44,164.00
	Stage I (allowable at 50%)							73,385.59
	Stage II (allowable at 35%)							63,676.52
TOTALS		$44,164.01		$44,164.01		$		$181,226.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 18, 1974 *Payee Hicks Dome Account
Joseph A. Porter

Per Joseph A. Porter Title Geologist

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

FOR OPERATOR'S USE

REMARKS

FOR GOVERNMENT USE

REMARKS

1) Claimed $25.96
Allow $25.95
Disallow $0.01
Arithmetical error on Invoice No.6, pg. 3, Boyles Bros., Oct. 31, 1973. No. of sacks claimed (139.5) does not agree with total billed on Invoice No.6, pg. 3 plus total billed on Invoice No.7, pg. 1, Nov. 30, 1973.

2) A wedge is analagous to a casing shoe and used to deflect the drill rods past a cavity at about 330 feet. It saved the hole from being abandoned. I recommend that it be allowed as claimed.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. For items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated Costs of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's share of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

OPERATOR'S REPORT

Sept. Oct. Nov. Dec. 1973

Considerable difficulties were encountered in drilling OME-8 and OME-9. The first attempt to drill OME-8 was abandoned and the hole was moved twenty feet where the hole was completed. Problems on both holes were due principally to cavities. These holes are discussed separately.

OME-8 (FSB-3) - Abandoned

This hole was first drilled with air rotary to a total depth of 760 feet. Solid rock was encountered at 107.5 feet and 7 inch casing was set. The hole was then drilled with a down-hole hammer and tricone rock bits to a total depth of 760 feet.

Several cavities were encountered between 107.5 and 300 feet. They caused no real problems for the rotary. A large cavity was encountered between 300 and 320 feet. At this point all cuttings were lost.

The cavity was initially filled with rubble and chert cavings. As drilling progressed from 320 feet to 760 feet most of the cuttings apparently accumulated in this cavity and several smaller cavities below. Considerable difficulty was encountered in getting the bit past 320 feet when bit trips were made.

An attempt would have been made to set 4 inch casing through the cavity using the air rotary drill. However, the casing was not readily available. Contractor inventories of NX casing were also insufficient in as much as what was available was being used in holes then being drilled. It was decided to move the rotary to the next hole, OME-9, and set the NX casing in OME-8 with the core drill.

Initial attempts to set NX casing were unsuccessful. An attempt was made to wash the hole out using a tricone bit and drill mud. This was also unsuccessful. NX casing was advanced to approximately 330 feet by washing in front of the casing with a 2 15/16 inch rock bit and then washing the casing down. The casing was advanced to 380 feet. The NX casing subsequently twisted off in the cavity leaving 60 feet of NX casing and a casing shoe in the hole. Because of the caving cuttings and rubble it was impossible to fish the tools.

An attempt was made to wedge the hole at 331 feet and redrill from that point. Because of the openings and the size of the hole, it was impossible to get cement to stay around the wedge so that the hole could be drilled. Several attempts were made to cement. Both were unsuccessful.

Due to difficulties in obtaining copy work only one copy of the supplementary material is included.

Hopefully this will facilitate interpretation of the voucher.

Since none of the holes for this stage were completed, the summary of the geology will be included with the next voucher.

As discussed several times by phone during this period of time, both holes encountered considerable difficulty in getting started. Actual costs greatly exceed those allowed in the contract. The following summarizes cost incurred, amount claimed and the total amounts not claimed here:

FSB-3

OME-8 (abandoned)

Total Invoiced Cost	$ 12,376.61
Claimed for reimbursement	9,019.46
Excess	$ 3,357.15

FSB-3

OME-8 (completed)

Total Invoiced Cost	$ 7,669.30
Claimed for reimbursement	5,459.40
Excess	$ 2,209.90

Hamp-8

OME-9

Total Invoiced Cost	$ 7,666.81
Claimed for reimbursement	3,340.00
Excess	$ 4,326.81

Total excess of cost not claimed $ 9,893.86

We are hopeful that suitable amendments can be made that will allow us to submit these costs for reimbursement.

Please advise if you need further documentation or explanation of the voucher or the supplementary material.

Sincerely,

Joseph A. Porter

cc. J.L. Carroll
Enclosures

Box 447

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois
62982

June 20, 1974

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U.S. Geological Survey
National Center, Mail Stop 920
12201 Sunrise Valley Drive
Reston, VA 22092

Re: OME-6873 (Fluorspar, et al.)
Hicks Dome Account
Hicks Dome Property
Hardin County, Illinois

Dear Mr. Kirkemo:

Enclosed is a composite voucher for the months of September, October, November and December, 1973, for Stage III of the contract. For the sake of simplicity in presentation the material is submitted in four parts. These are:

Part I Submitted in quadruplicate. Consists of Form 9-1648 for the time period with totals and accumulated totals. This is essentially a composite of the supplementary parts. Explanatory footnotes and the Operator's Report are included. Some invoices which apply to several phases are attached.

Part II To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (abandoned).
FSB-3

Part III To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (completed).
FSB-3

Part IV To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-9.
Hamp 8

Part V To supplement Part I. Consists of costs incurred in Categories 2, 3 and 7 during this period.

Retain these
drafts

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873

Contract 14-08-0001 2305

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.

Address Shearman and Sterling, 53 Wall St. New York, NY 10005

Contract Amount $ ~~56,190~~ 114,190.00

Gov't. Participation ~~35~~ $ ~~19,766~~ 50 57,090.00

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$		$		$
Dozing, hours	20	250.00	20	250.00	20	250.00	20	250.00
Rotary demobil.	½	175.00	½	175.00	0.5	175.00	0.5	175.00
Drilling	1937	8248.00	1937	8248.00	1937	8248.00	1937	8248.00
Service time	380	7435.00	380	7435.00	380	7435.00	380	7435.00
Mud & cement	139.5	825.96	139.5	825.96	194	825.95	194	825.95
Casing, surface	296.6	444.90	296.6	444.90	296.6	444.90	296.6	444.90
Core drilling, mobil	½	400.00	½	400.00	0.5	400.00	0.5	400.00
Set-up/casing	29	565.50	29	565.50	29	565.50	29	565.50
NX 500-1000	324	1603.80	324	1603.80	324	1,603.80	324	1,603.80
1000-1500	457.7	2517.35	457.7	2517.35	457.5	2517.35	457.7	2,517.35
BX 500-1000	500	2850.00	500	2850.00	500	2850.00	500	2850.00
1000-1500	727.3	4500.96	727.3	4500.96	727.3	4500.96	727.3	4500.96
1500-2000	763	4763.00	763	4763.00	763	4763.00	763	4763.00
2000-2500	141	937.65	141	937.65	141	937.65	141	937.65
Casing shoes	3	583.44	3	583.44	3	583.44	3	583.44
Reaming, hours	3	67.50	3	67.50	3	67.50	3	67.50
Inst./remove casing	10	195.00	10	195.00	10	195.00	10	195.00
Standby	3	56.25	3	56.25	3 hr.	56.25	3 hr.	56.25
Cement (hole stab.)	60	1170.00	60	1170.00	60 hr.	1170.00	60	1170.00
Wedge	1	230.63	1	230.63	1	230.63	1	230.63
Lost, damg. casing	110	319.00	110	319.00	110	319.00	110	319.00
Category (2)								
Geologist-Supervisor	3	4200.00	3	4200.00	3 mo	4,200.00	3 mo.	4,200.00
Assistant Geologist	1	700.00	1	700.00	1 mo.	700.00	1 mo.	700.00
Sampler	2	247.57	2	247.57	2 mo	247.57	2 mo	247.57
Category (3)								
Core boxes	342	427.50	342	427.50	342	427.50	342	427.50
Category (7)								
Office-secretarial	3	450.00	3	450.00	3 mo.	450.00	3 mo.	450.00
Totals	Stage III (allowable at 50%)					44,164.00		44,164.00
	Stage I (allowable at 50%)							73,385.59
	Stage II (allowable at 35%)							63,676.52
TOTALS		$44,164.01		$44,164.01		$		$181,226.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 18, 1974 *Payee Hicks Dome Account
Joseph A. Porter

Per Joseph A. Porter Title Geologist

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example, "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001).

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____ (SEE OTHER SIDE)

FOR OPERATOR'S USE

REMARKS

FOR GOVERNMENT USE

REMARKS

1) Claimed $25.96
Allow $25.95
Disallow 0.01
Arithmetical error on Invoice No. 6, Pg. 3, Boyles Bros., Oct. 31, 1973. No. of sacks claimed (137.5) does not agree with total billed on Invoice No. 6, pg. 3 plus total billed on Invoice No. 7, pg. 1, Nov. 30, 1973.

2) A wedge is analagous to a casing shoe and used to deflect the drill rods past a cavity at about 330 feet. It saved the hole from being abandoned. I recommend that it be allowed as claimed.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for ment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations ountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each nth during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated ts of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's re of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by docu — tary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or ices, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, loyee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is acticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to ent of the final Operator's Monthly Voucher.

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I Page 1

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Jan. Feb. March 1974

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.

Address Shearman and Sterling, 53 Wall St. New York, NY 10005

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $ ~~56,180~~ 114,180.00

Gov't. Participation % ~~35~~ 50 $ ~~19,763~~ 57,090.00

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$		$		$
Dozing, Hours	30	375.00	50	625.00	30	375.00	50	625.00
Wagon (transport)	22	88.00	22	88.00	22	88.00	22	88.00
Rotary (demobil.)	-	-	½	175.00	—	—	0.5	175.00
Drilling 0-500	1000	5000.00	2937	13,248.00	1000	5,000.00	2937	13,248.00
Service time	20	445.00	400	7,880.00	20	445.00	400	7880.00
Mud	32.5	178.75	172	1.004.71	32.5	178.75	226.5	1004.70
Casing lost	739.5	1109.25	1036.1	1,554.15	739.5	1109.25	1036.1	1,554.15
Core drilling, mobil	-	-	½	400.00	—	—	0.5	400.00
Set-up/casing	20	390.00	59	955.50	20	390.00	49	955.50
Coring NX 500-1000	1000	5400.00	1324	7,003.80	1,000	5400.00	1324	7003.80
1000-1500	1000	5925.00	1457.7	8,442.35	1,000	5925.00	1457.7	8442.35
1500-2000	1000	6575.00	1000	6,575.00	1,000	6575.00	1000	6575.00
2000-2500	522	3902.90	522	3,902.90	522	3,902.90	522	3902.90
2500-3000	16	134.40	16	134.40	16	129.60 1)	16	129.60
BX 500-1000	-	-	500	2,850.00	—	—	500	2850.00
1000-1500	-	-	727.3	4,500.96	—	—	727.3	4,500.96
1500-2000	237	1611.60	1000	6,374.60	237	1,611.60	1000	6,374.60
2000-2500	1197	8335.05	1338	9,272.70	1197	8,335.05	1338	9,272.70
2500-3000	397	3176.00	397	3,176.00	397	3176.00	397	3,176.00
Excess bit costs	1401	913.90	1401	913.90	902 2)	586.30 2)	902	586.30
Casing shoes	-	-	3	583.44	—	—	3	583.44
Reaming	-	-	3	67.50	—	—	3	67.50
Instal/remove casing	9	175.50	19	370.50	9	175.50	19	370.50
Standby (survey)	62	1162.50	65	1,218.75	62	1162.50	65	1218.75
Cement (hole stab.)	-	-	60	1,170.00	—	—	60	1170.00
Wedge	-	-	1	230.63	—	—	1	230.63
Lost/damg. NX casing	20	58.00	130	377.00	20	58.00	130	377.00
TOTALS (for page 1)		$44,955.85		$83,094.78		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account

Per Joseph A. Porter Title Geologist

"When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense (U.S. Code, Title 18, Sec. 1001).

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I Page 2

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Jan. Feb. March 1974

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.
Address Shearman and Sterling, 53 Wall St. New York, NY 10005

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $ 56,450 114,180.00
Gov't. Participation % ~~35~~ $ ~~19,768~~ 50 57,090.00

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (2)		$		$		$		$
1 Supervisor-Geol.	2.5	3500.00	5.5	7700.00	2.5	3,500.00	5.5	7,700.00
2 Assistant Geol.	3	2100.00	4	2800.00	3	2100.00	4	2,800.00
Sampler	-	-	2	247.57	—	—	2	247.57
Category (3)								
3 Core boxes	596	745.00	938	1172.50	596	745.00	938	1,172.50
Sample bags	73	36.50	73	36.50	73	36.50	73	36.50
Category (7)								
4 Secretarial-Office	3	450.00	6	900.00	3	450.00	6	900.00
Survey Instr. rent	1	513.56	1	513.56	1	513.36	1	513.36
CaF_2 Spec. Ion	26	58.00	26	58.00	26	58.00	26	58.00
CaF_2 (wet assay)	73	292.00	73	292.00	73	292.00	73	292.00
$BaSO_4$ (wet assay)	73	219.00	73	219.00	73	219.00	73	219.00
Other assays	58	189.00	58	189.00	58	189.00	58	189.00
Spectro. analysis	21	210.00	21	210.00	21	210.00	21	210.00
totals (page 2)		8313.06		14338.13				
Totals Stage III (allowable at 50%)						52,936.31		97,100.31
Stage I (allowable at 50%)								73,385.59
Stage II (allowable at 35%)								63,676.52
TOTALS		$53,268.91		$97,432.91		$52,936.31		$234,162.42

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account

Per Joseph A. Porter Title Geologist

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A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

(SEE OTHER SIDE)

FOR OPERATOR'S USE

RRS

REMARKS

1) Claimed *134.40
Allow 129.60
Disallow *4.80

Contract allows *8.10/ft for drilling NXWL from 2500 to 3000 ft.

2) Claimed 913.90
Allow 586.30
Disallow 327.60

Allowable footage for excess bit wear appears to be 902 ft. rather than 1401 ft. as claimed according to Christensen Diamond Products Co. invoices F.R. 19261, 19262, 19263, 19264, and 19265 all dated Feb. 7, 1974. May be revised if the invoices are misinterpreted or additional data furnished. Many errors in Christensen invoices.

3) Claimed 513.56
Allow 513.36
Disallow 0.20

Boyles Bros. invoice 33-3, March 4, 1974 indicates rental at *513.36.

Total disallowances *332.60

OPERATOR'S MONTHLY REPORT

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FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for ayment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations ncountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each onth during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. or items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated osts of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's hare of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by docu — nentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, nd net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or ervices, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, mployee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by he signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is racticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to nt of the final Operator's Monthly Voucher.

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $ ~~56,790~~ 114,180.00
Gov't. Participation % ~~25~~ $ ~~14,790~~ 50 57,090.00

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.
Address Shearman and Sterling, 53 Wall St. New York, NY 10005

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$		$		$
Dozing, hours	20	250.00	20	250.00	20	250.00	20	250.00
Rotary demobil.	½	175.00	½	175.00	0.5	175.00	0.5	175.00
Drilling	1937	8248.00	1937	8248.00	1937	8248.00	1937	8248.00
Service time	380	7435.00	380	7435.00	380	7435.00	380	7435.00
Mud & cement	139.5	825.96	139.5	825.96	194	825.95	194	825.95
Casing, surface	296.6	444.90	296.6	444.90	296.6	444.90	296.6	444.90
Core drilling, mobil	½	400.00	½	400.00	0.5	400.00	0.5	400.00
Set-up/casing	29	565.50	29	565.50	29	565.50	29	565.50
NX 500-1000	324	1603.80	324	1603.80	324	1,603.80	324	1,603.80
1000-1500	457.7	2517.35	457.7	2517.35	457.5	2517.35	457.7	2517.35
BX 500-1000	500	2850.00	500	2850.00	500	2850.00	500	2850.00
1000-1500	727.3	4500.96	727.3	4500.96	727.3	4500.96	727.3	4500.96
1500-2000	763	4763.00	763	4763.00	763	4763.00	763	4763.00
2000-2500	141	937.65	141	937.65	141	937.65	141	937.65
Casing shoes	3	583.44	3	583.44	3	583.44	3	583.44
Reaming, hours	3	67.50	3	67.50	3	67.50	3	67.50
Inst./remove casing	10	195.00	10	195.00	10	195.00	10	195.00
Standby	3	56.25	3	56.25	3 hr.	56.25	3 hr.	56.25
Cement (hole stab.)	60	1170.00	60	1170.00	60 hr.	1170.00	60	1170.00
Wedge	1	230.63	1	230.63	1	230.63	1	230.63
Lost, damg. casing	110	319.00	110	319.00	110	319.00	110	319.00
Category (2)								
Geologist-Supervisor	3	4200.00	3	4200.00	3 mo	4,200.00	3 mo.	4,200.00
Assistant Geologist	1	700.00	1	700.00	1 mo.	700.00	1 mo.	700.00
Sampler	2	247.57	2	247.57	2 mo	247.57	2 mo	247.57
Category (3)								
Core boxes	342	427.50	342	427.50	342	427.50	342	427.50
Category (7)								
Office-secretarial	3	450.00	3	450.00	3 mo.	450.00	3 mo.	450.00
Totals	Stage III (allowable at 50%)					44,164.00		44,164.00
	Stage I (allowable at 50%)							73,385.59
	Stage II (allowable at 35%)							63,676.52
TOTALS		$44,164.01		$44,164.01		$		$181,226.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 18, 1974 *Payee Hicks Dome Account
Joseph A. Porter

Per Joseph A. Porter Title Geologist

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A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense (U. S. Code, Title 18, Sec. 1001).

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

FOR OPERATOR'S USE

REMARKS

FOR GOVERNMENT USE

REMARKS

1) Claimed $25.96
Allow $25.95
Disallow $0.01
Arithmetical error on Invoice No.6, Pg. 3, Boyles Bros., Oct. 31, 1973. No. of sacks claimed (139.5) does not agree with total billed on Invoice No.6, Pg. 3 plus total billed on Invoice No. 7, Pg. 1, Nov. 30, 1973.

2) A wedge is analagous to a casing shoe and used to deflect the drill rods past a cavity at about 330 feet. It saved the hole from being abandoned. I recommend that it be allowed as claimed.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for ment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations ountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each nth during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated s of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's e of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or ices, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, loyee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is acticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to ent of the final Operator's Monthly Voucher.

DIAMOND C.
ROTARY DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT
DRILLING ADDITIVES

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

INVOICE DATE: October 31, 1973
ORDER NUMBER: 33-3
INVOICE NUMBER: 6
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

HICKS DOME ACCOUNT
c/o Mr. Joseph Porter
P.O. Box 447
Rosiclare, Ill. 62982

Hole No.	From	To	Footage	Rate	Total
FSB-2	2385	2500	115	$ 7.50	$ 862.50
	2500	2545	45	8.40	378.00
	Surveying		7 hrs.	19.50	136.50
	Pulling Casing		48 hrs.	19.50	936.00
	Mud used to hold cave to get down to stuck casing		5 sks.	2.75	13.75
	Casing lost and damaged in hole		280 ft.	2.90	812.00
	NX Casing shoe lost in hole - Serial #3S-14890				
	15.46X9.50 + 42.00				188.87
	Rental on Eastman Camera				202.49
			+ 15%		30.37
					3,560.48

DIAMOND CORE DRILLING
ROTARY DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT
DRILLING ADDITIVES

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HICKS DOME ACCOUNT
Page 2

Hole No.	From	To	Footage	Rate	Total
FSB-3	Setting over and trying to clean out hole				
	Weekstarting Oct. 8th and ending Oct. 13th		117 hrs.	$ 19.50	$ 2,281.50
	Week starting Oct 15th and ending Oct. 20th		120 hrs.	19.50	2,340.00
	Week starting Oct. 22nd ahru Oct. 25th		81 hrs.	19.50	1,579.50
	Moving over and starting new hole				
	Hourly rate - Oct. 26 & 27		39 hrs.	19.50	760.50 702.00 X
	Oct. 29, 20, 31		40 hrs.	19.50	780.00
					7,683.00

DIAMOND CORE DRILLING
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HICKS DOME ACCOUNT

Page 3

Hole No.	From	To	Footage	Rate	Total
FSB-3 Cont.	Materials used in hole:				
	Mud -	50# bags	48	$ 2.75	$ 132.00
		100# bags	49	5.50	269.50
	Cal Seal	100# bags	20	7.885	157.71
	NX Casing		+15%		23.66
	NXWL rods		80 ft.	2.90	232.00
	PK rod		30 ft.	3.60	108.00
	N rod		10 ft.	4.80	48.00
	NXWL rod to N rod adapter		1 ft.	12.57	12.57
	1 - 6¼" Rock Bit				10.42
	2 - 3 7/8" Rock Bits				100.95
	2 - 2 15/16" Rock bits			54.04	108.08
				55.11	110.22
					Cont.

DIAMOND CORE DRILLING
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HICKS DOME ACCOUNT
Page 4

Hole No.	From	To	Footage	Rate	Total
FSB-3 Cont.	NXC Shoe - Serial # 3S-23855 16.05 x 9.50 + 42.00				$ 194.48
	NXC Shoe - Serial # 3S-23852 16.05 x 9.50 ± 42.00				194.48
	NXC Shoe - Serial # 3S-23853 16.05 x 9.50 + 42.00				194.48
	Mileage driven to get materials or put materials on job: 2 Round trips from M'boro to jobsite - 760 miles; 3 Round trips from jobsite to Crossville - 450 miles; 1 " " " " " Carmi - 135 miles; 1 " " " " " Marion - 100 miles				
		Total mileage	1445 miles	.35	505.75
	Core boxes (NX size)		300	1.50	450.00
		Total of pages 3 & 4			2,852.30

DIAMOND CORE DRILLING
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HICKS DOME ACCOUNT
Page 5

INVOICE DATE: October 31, 1973
ORDER NUMBER: 33-3
INVOICE NUMBER: 6
CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

Hole No.	From	To	Footage	Rate	Total
Cut-Out # 19258					
	2 - NXC3 Serial # 3S-12565 & 3S-12566		159'	$ 1.29	
	Less Scrap & Salvage				$ 205.42
	Less		159'	.85	- 135.15
					70.27
	2 - NXC Serial #3S-28833 & 3S-28834		208'	1.71	355.09
	(Less Scrap & Salvage)				
	Less		208'	.85	- 176.80
					178.29

DIAMOND CORE DRILLING
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INVOICE DATE: October 31, 1973
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TERMS: As per contract
LOCATION: Rosiclare, Ill

HICKS DOME ACCOUNT

Page 6

Hole No.	From	To	Footage	Rate	Total
1 - NXC3 Serial #3S-28842			63'	$ 1.35	$ 84.88
	Less Scrap & Salvage		63'	.85	- 53.55
					31.33
1 - NXC3 Serial # 3S-28841 (Less Scrap & Salvage)			231'	.70	161.43
	Less		231'	.85	- 196.35
					34.92 CR.
1- NXC3 Serial # 3S-28840 (Less Scrap & Salvage)			32'	5.08	162.66
	Less		32'	.85	- 27.20
					135.46

9.

DIAMOND CORE DRILLING
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INVOICE DATE: October 31, 1973
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CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare, Ill.

Hicks Dome Account

Page 7

Hole No.	From	To	Footage	Rate	Total
Cut-Out #19259					
1 - NXC Serial #3S-23070			146'	$ .78	$ 113.88
	(Less Scrap & Salvage)				
		Less	146'	.85	- 124.10
					10.22 CR.
2 - NXC Serial #'s 3S-22759 & 2S-46356			381'	.46	175.26
	(Less Scrap & Salvage)				
		Less	381'	.85	- 323.85
					148.59 CR.

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CONTRACT: HICKS DOME Rosiclare
TERMS: As per contract
LOCATION: Rosiclare , Ill.

HICKS DOME ACCOUNT

Page 8

Hole No.	From	To	Footage	Rate	Total
1 - NXC Serial # 3S-22755			35'	$ 4.77	
	(Less Scrap & Salvage)				$ 166.95
		Less	35'	.85	- 29.75
					137.20
1 NXC3 - Serial # 3S-26156			115'	1.60	184.00
	(Less Scrap & Salvage)				
		Less	115'	.85	- 97.75
					86.25
		October Invoice Total - $ 14,540.85			

OK for payment

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Branch of Budget and Finance
Washington, D. C. 20242

ADMINISTRATIVE SUSPENSION STATEMENT

Name and Address of Payee: Hicks Dome Account
c/o Gilbert Kerlin, Esq.
Shearman and Sterling, 53 Wall St.
New York, NY 10005

Amount Claimed:	Differences (Explained Below)	Amount Approved
$ 25,011.43	$ 3,311.68	$ 21,699.75 7,594.91 (Govt Part 35%)
Bu. Voucher No.	**Payee's Invoice No.**	**Period**
	Docket #6873 Contract #2306	Sept. & Oct. 1973

EXPLANATION

Actual Costs		
Category (1) Independent Contracts		
Bulldozing		
Claimed	150.00	
Allowed	-0-	150.00
May be reclaimed upon receipt of copy of invoice for bulldozing.		
Lost Casing		
Claimed 73 ft at 1.50/ft	109.50	
Allowed 73 ft at 1.40/ft	102.20	7.30
Diamond Drilling 2000-2500 ft		
Claimed 904 ft at 7.50/ft	6,780.00	
Allowed 789 ft at 7.50/ft	5,917.50	862.50
Invoices total $5,917.50 for 789ft at $7.50/ft fo Nx drilling in the range from 2,000 to 2,500 ft - Oct Invoice		
Diamond Drilling 2500-3000 ft		
Claimed 45 ft at 8.40/ft	378.00	
Allowed	-0-	378.00
May be reclaimed upon receipt fo copy invoice for drilling in this range. - Oct. Inv.		
Set Up Time 25 on Sept Inv.		
Claimed 49 on Oct	1,384.50	
Allowed	487.50	897.00
Contractor's invoices total 25 hours to set up rig and install casing		

Any reclaim for items deducted must be included as a separate item on subsequent monthly voucher and supported by the original of this statement.

Branch of Budget and Finance

Standby Time 3 in rent 7 in Oct 10 hrs Claim		
Claimed	193.00	
Allowed	-0-	193.00
May be reclaimed upon receipt of supporting invoices.		
Lost casing		
Claimed Oct invoice	812.00	
Allowed	-0-	812.00
May be reclaimed upon receipt of supporting invoices.		
Excess Bit Costs		
Claimed	329.61	
Allowed	331.48	(1.87)
Arithemetical errors in compiling claim.		
Drill Muds		
Claimed	35.75	
Allowed	22.00	13.75
No invoices submitted for excess claim. May be reclaimed upon receipt of missing invoices.		
Category (7) Miscellaneous		
Spectrographic Analyses		
Claimed 45 samples	342.00	
Allowed 38 samples	342.00	-0-
Invoices indicate 45 samples but amount claimed includes charges for only 38 samples. Balance of $70.00 for 7 analysis may be claimed.		
		3,311.68

Larry G. Robinson
For: Use of D-4 tractor leveling sites
moving drill Sept 73
Flicks Home Account % Joseph A. Porter
Box 447
Rossville, Ill.

6 hrs	Cleaning out pond receiver	12 50	75 00
8 hrs	leveling drill site	12 50	100 00
8 hrs	leveling drill site	12 50	100 00
10 hrs	leveling drill site	12 50	125 00
			400 00

Larry G. Robinson
pd 10/15/73

CERTIFIED TRUE COPY

Box 447 Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois
62982

June 11, 1974

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U.S. Geological Survey
National Center, Mail Stop 920
12201 Sunrise Valley Drive
Reston, VA 22092

Re: OME-6873 (Fluorspar, et al.)
Hicks Dome Account
Hicks Dome Property
Hardin County, Illinois

Dear Mr. Kirkemo:

I am submitting here a voucher Form 9-1648 to supplement the previously submitted September - October, 1973 voucher. This is being submitted to replace the letter of March 21 where credit was claimed for certain costs which were previously disallowed. Required receipts were included with the letter.

Since copy facilities are not easily available here I would appreciate if you would return two Xerox copies.

Please advise if this in order.

Sincerely,

Joseph A. Porter

Joseph A. Porter

Enc. 4
cc. J.L. Carroll
file

MARCH 1968

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage II

Submitted to supplement

OPERATOR'S MONTHLY VOUCHER For Month of Sept. - Oct., 1973

Operator's Name: Hicks Dome Account c/o Gilbert Kerlin, Esq.

Address: Shearman and Sterling, 53 Wall St. New York, NY 10005

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $ 56,480

Gov't. Participation % 35 $ 19,768

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$ 10 72		$		$
Dozing, hours	32	150.00	80	750.00	32	150.00	80	750.00
Rotary drilling	-	-	½	175.00	—	—	0.5	175.00
Drilling feet	-	-	1821	7,284.00	—	—	1821	7,284.00
Casing	-	-	341.5	478.10	—	—	341.5	478.10
Service time	-	-	3.75	150.00	—	—	3.75	150.00
Core drilling, Mobil	-	-	½	500.00	—	—	0.5	500.00
Coring NX 0-500	-	-	175	700.00	—	—	175	700.00
500-1000	-	-	996	5,826.60	—	—	996	5826.60
1000-1500	-	-	1500	9,525.00	—	—	1500	9525.00
1500-2000	-	-	1500	10,350.00	—	—	1500	10,350.00
2000-2500	115	862.50	1425	10,687.50	115	862.50	1425	10,687.50
2500-3000	45	378.00	45	378.00	45	337.50	45	337.50
Set-up/casing, hrs	46	897.00	187	3,198.00	46	897.00	164	3198.00
Reaming	-	-	51	1,147.50	—	—	51	1147.50
Reaming bits	-	-	526	526.00			526	526.00
Survey time	10	193.00	23	380.50	7	136.50	17	324.00
Casing, Last	280	812.00	280	812.00	280	812.00	280	812.00
Excess bits	-	1.87	1179	590.18	—	—	1179	590.18
Mud	5	13.75	72.5	317.50	5	13.75	68.5	317.50
Category (2)								
Geologist-Supervisor	-	-	4	5,950.00	—	—	4.25	5,950.00
Sampler-Assistant	-	-	4	852.44	—	—	3.25	852.44
Category (3)								
Core boxes	-	-	614	767.50	—	—	614	767.50
Sample bags	-	-	58	29.00	—	—	58	29.00
Category (7)								
Office Expense	-	-	4	579.20	—	—	4	579.20
Assay CaF2 (wet)	-	-	113	452.00	—	—	113	452.00
BaSO4 (wet)	-	-	113	339.00	—	—	113	339.00
Spectrographic	7	70.00	45	412.00	7	70.00	45	412.00
CaF2 Spec. Ion	-	-	77	163.00	—	—	77	163.00
Other assays	-	-	165	453.50	—	—	165	453.50
Stage II total (allowable at 35%)						3,279.25		63,676.52
Stage I total (allowable at 50%)								73,385.59
TOTALS		$3,378.12		$63,773.52		$		$137,062.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 11, 1974 Payee Hicks Dome Account

Joseph A. Porter

Per Joseph A. Porter Title Geologist

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

(SEE OTHER SIDE)

FOR OPERATOR'S USE

EMARKS

FOR GOVERNMENT USE

REMARKS

1) Claimed $378.00
Allow 337.50 ($7.50 x 45)
Disallow $40.50

No price established for depth below 2500 feet. Allow footage claimed at $7.50 per foot. Additional depth allowed by Article 5 c, par. 1, Amendment No. 1.

2) Claimed $193.00
Allow 136.50 ($19.50 x 7)
Disallow 56.50

Invoice shows only 7 hours survey time, Hole FSB-2.

3) Claimed $1.87
Allow 0
Disallow 1.87

Paid on previous voucher.

TOTAL DISALLOWANCES $98.87

Total costs approved for stages I and II do not exceed funds available. Amendment No. 1, page 2, Article 5 b, last paragraph, permits excess funds from stage I to be used in Stage II.

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PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

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Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

FORM 9-1648
MARCH 1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage II
Submitted to supplement

OPERATOR'S MONTHLY VOUCHER

For Month of: Sept. - Oct., 1973

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $ 56,480
Gov't. Participation % 35 $ 19,768

Operator's Name: Hicks Dome Account
Address: c/o Gilbert Kerlin, Esq.
Shearman and Sterling, 53 Wall St.
New York, NY 10005

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (1)		$		$		$		$
Dozing, hours	32	150.00	80	750.00	32	150.00	80	750.00
Rotary drilling	-	-	½	175.00	--	--	0.5	175.00
Drilling feet	-	-	1821	7,284.00	--	--	1821	7,284.00
Casing	-	-	341.5	478.10	--	--	341.5	478.10
Service time	-	-	3.75	150.00	--	--	3.75	150.00
Core drilling, Mobil	-	-	½	500.00	--	--	0.5	500.00
Coring NX 0-500	-	-	175	700.00	--	--	175	700.00
500-1000	-	-	996	5,826.60	--	--	996	5,826.60
1000-1500	-	-	1500	9,525.00	--	--	1500	9,525.00
1500-2000	-	-	1500	10,350.00	--	--	1500	10,350.00
2000-2500	115	862.50	1425	10,687.50	115	862.50 1/	1425	10,687.50
2500-3000	45	378.00	45	378.00	45	337.50 1/	45	337.50
Set-up/casing, hrs	46	897.00	187	3,198.00	46	897.00	187	3,198.00
Reaming	-	-	51	1,147.50	--	--	51	1,147.50
Reaming bits	-	-	526	526.00			526	526.00
Survey time	10	193.00	23	380.50	7	136.50 2/	17	324.00
Casing, lost	280	812.00	280	812.00	280	812.00	280	812.00
Excess bits	-	1.87	1179	590.18	--	-- 3/	1179	590.18
Mud	5	13.75	72.5	317.50	5	13.75	68.5	317.50
Category (2)								
Geologist-Supervisor	-	-	4	5,950.00	--	--	4.25	5,950.00
Sampler-Assistant	-	-	4	852.44	--	--	3.25	852.44
Category (3)								
Core boxes	-	-	614	767.50	--	--	614	767.50
Sample bags	-	-	58	29.00	--	--	58	29.00
Category (7)								
Office Expense	-	-	4	579.20	--	--	4	579.20
Assay CaF2 (wet)	-	-	113	452.00	--	--	113	452.00
BaSO4 (wet)	-	-	113	339.00	--	--	113	339.00
Spectrographic	7	70.00	45	412.00	7	70.00	45	412.00
CaF2 Spec. Ion	-	-	77	163.00	--	--	77	163.00
Other assays	-	-	165	453.50	--	--	165	453.50
Stage II total (allowable at 35%)						3,279.25		63,576.52
Stage I total (allowable at 50%)								73,385.59
TOTALS		$3,378.12		$63,773.52		$		$ 137,062.11

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 11, 1974 Payee Hicks Dome Account
Joseph A. Porter

Per [signature] Title Geologist

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001.)

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature Harold Kirbano Chief, OME ~~Field Officer~~ Date 7/24/74

Approved for: $
(SUBJECT TO AUDIT)

Signature

Date Vou. No.
(SEE OTHER SIDE)

FOR OPERATOR'S USE	FOR GOVERNMENT USE
REMARKS	REMARKS

1/ Claimed $378.00
Allow 337.50 ($7.50 x 45)
Disallow $40.50

No price established for depth below 2500 feet. Allow footage claimed at $7.50 per foot. Additional depth allowed by Article 5c, par. 1, Amendment No. 1.

2/ Claimed $193.00
Allow 136.50 ($19.50 x 7)
Disallow $56.50

Invoice shows only 7 hours survey time, Hole FSB-2.

3/ Claimed $1.07
Allow 0
Disallow $1.07

Paid on previous voucher.

TOTAL DISALLOWANCES $98.07

Total costs approved for stages I & II do not exceed funds available. Amendment No. 1, page 2, Article 5b, last paragraph permits excess funds from Stage I to be used in Stage II.

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for payment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations encountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each month during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. For items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated Costs of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's share of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by documentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by the signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is impracticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to payment of the final Operator's Monthly Voucher.

Box 447

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois
62982

June 20, 1974

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U.S. Geological Survey
National Center, Mail Stop 920
12201 Sunrise Valley Drive
Reston, VA 22092

Re: OME-6873 (Fluorspar, et al.)
Hicks Dome Account
Hicks Dome Property
Hardin County, Illinois

Dear Mr. Kirkemo:

Enclosed is a composite voucher for the months of September, October, November and December, 1973, for Stage III of the contract. For the sake of simplicity in presentation the material is submitted in four parts. These are:

Part I Submitted in quadruplicate. Consists of Form 9-1648 for the time period with totals and accumulated totals. This is essentially a composite of the supplementary parts. Explanatory footnotes and the Operator's Report are included. Some invoices which apply to several phases are attached.

Part II To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (abandoned).

Part III To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (completed).

Part IV To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-9.

Part V To supplement Part I. Consists of costs incurred in Categories 2, 3 and 7 during this period.

Due to difficulties in obtaining copy work only one copy of the supplementary material is included.

Hopefully this will facilitate interpretation of the voucher.

Since none of the holes for this stage were completed, the summary of the geology will be included with the next voucher.

As discussed several times by phone during this period of time, both holes encountered considerable difficulty in getting started. Actual costs greatly exceed those allowed in the contract. The following summarizes cost incurred, amount claimed and the total amounts not claimed here.

OME-8 (abandoned)

Total Invoiced Cost	$ 12,376.61
Claimed for reimbursement	9,019.46
Excess	$ 3,357.15

OME-8 (completed)

Total Invoiced Cost	$ 7,669.30
Claimed for reimbursement	5,459.40
Excess	$ 2,209.90

OME-9

Total Invoiced Cost	$ 7,666.81
Claimed for reimbursement	3,340.00
Excess	$ 4,326.81

Total excess of cost not claimed $ 9,893.86

We are hopeful that suitable amendments can be made that will allow us to submit these costs for reimbursement.

Please advise if you need further documentation or explanation of the voucher or the supplementary material.

Sincerely,

Joseph A. Porter

cc. J.L. Carroll
Enclosures

OPERATOR'S REPORT

Sept. Oct. Nov. Dec. 1973

Considerable difficulties were encountered in drilling OME-8 and OME-9. The first attempt to drill OME-8 was abandoned and the hole was moved twenty feet where the hole was completed. Problems on both holes were due principally to cavities. These holes are discussed separately.

OME-8 (FSB-3) - Abandoned

This hole was first drilled with air rotary to a total depth of 760 feet. Solid rock was encountered at 107.5 feet and 7 inch casing was set. The hole was then drilled with a down-hole hammer and tricone rock bits to a total depth of 760 feet.

Several cavities were encountered between 107.5 and 300 feet. They caused no real problems for the rotary. A large cavity was encountered between 300 and 320 feet. At this point all cuttings were lost.

The cavity was initially filled with rubble and chert cavings. As drilling progressed from 320 feet to 760 feet most of the cuttings apparently accumulated in this cavity and several smaller cavities below. Considerable difficulty was encountered in getting the bit past 320 feet when bit trips were made.

An attempt would have been made to set 4 inch casing through the cavity using the air rotary drill. However, the casing was not readily available. Contractor inventories of NX casing were also insufficient in as much as what was available was being used in holes then being drilled. It was decided to move the rotary to the next hole, OME-9, and set the NX casing in OME-8 with the core drill.

Initial attempts to set NX casing were unsuccessful. An attempt was made to wash the hole out using a tricone bit and drill mud. This was also unsuccessful. NX casing was advanced to approximately 330 feet by washing in front of the casing with a 2 15/16 inch rock bit and then washing the casing down. The casing was advanced to 380 feet. The NX casing subsequently twisted off in the cavity leaving 60 feet of NX casing and a casing shoe in the hole. Because of the caving cuttings and rubble it was impossible to fish the tools.

An attempt was made to wedge the hole at 331 feet and redrill from that point. Because of the openings and the size of the hole, it was impossible to get cement to stay around the wedge so that the hole could be drilled. Several attempts were made to cement. Both were unsuccessful.

Because of the fish in the hole, bad caving ground and the inability to wedge past the fish it was decided to abandon the attempt to set casing and move.

It is possible that the decision to abandon should have been made earlier. However, at the time it was felt that a short move would (and did) encounter the same difficulties and it was desirable to save the 760 feet of hole that had already been drilled.

Amount claimed on Part II of the voucher totals $9,196.46. Actual cost incurred is as follows:

DiKor	$ 3,254.31
Boyles (hourly)	6,201.00
Materials	2,852.30
Total Cost	$12,376.61
Amount claimed for reimbursement	9,019.46
Unclaimed portion	$ 3,357.15

During this period of time, Boyles Bros. assigned their field superintendent, J.D. Conway, to the job in order to be sure best efforts were made to set the casing.

OME-8 (FSB-3) - Completed

A rotary drill was not readily available to start another hole. Therefore it was decided that it would be simpler to attempt to drill the hole using the diamond drill. Due to cavities this hole also encountered considerable problems between 0 and 333 feet. The hole was drilled with a tricone bit to 105.1 feet where solid rock was encountered. Four inch casing was set to this point. Various small cavities with caving ground were encountered. At 270 feet caving ground necessitated that NX casing be set and the hole reduced to BX. An additional 10 feet of BX was drilled to 280 feet and NX casing was reamed that distance.

Various cavities were encountered down to 330 feet. The hole could only be advanced by drilling BX and reaming the casing behind the BX drill rods. Several attempts were made to drill with the rock bit through the NX casing. Two casing shoes were totally destroyed by the caving chert. These methods were successful in getting the hole to 333 feet. From this point on no particular problems were encountered.

As with the previous hole, the interval from 0-500 feet was very expensive and exceeded the amounts allowed for in the contract. Total costs were as follows:

Boyles (hourly)	$ 5,265.00
330-500'	951.90
Other & material	1,452.40
Total Cost	$ 7,669.30
Amount claimed for reimbursement (Part III)	5,459.40
Unclaimed portion	$ 2,209.90

A fault was encountered near the base of the Maquoketa. The fault zone consisted of breccia and cavities. The largest cavity was 30 feet thick and was encountered from 1333.5 to 1363.5. Since we had already reduced to BX an attempt was made to complete the hole. The hole was advanced to 1450 feet when the rods twisted off in the cavity. Numerous attempts were made to fish the tools. These were unsuccessful. One hundred and ten feet were lost.

A wedge was set 68 feet above the top of the cavity and the hole redrilled. Fortunately redrilling missed the cavity and the hole was drilled to a depth of 1,763 feet during this period.

OME-9 (Hamp 8)

This hole was also predrilled by using air rotary in September. Solid rock was encountered at 107.5 feet and 7 inch surface casing was set. The hole was then drilled by down-hole hammer and tricone to a total depth of 760 feet. As with OME-8 numerous cavities were encountered in the upper 300 feet of the hole. Few samples were recovered. Drill cuttings apparently filled various cavities throughout the upper 300 feet of the hole.

Casing was not available to set with the air rotary drill. Consequently it was decided to let the diamond drill contractors set the casing when coring was to begin. In order to speed up the work, a second diamond drill contractor, Sprague and Henwood, was mobilized to finish this hole. The drill was set up on October 25, 1973. By this time the cuttings in the cavities had time to flow back into the hole and effectively plug it.

Considerable difficulty was encountered in washing out the hole and setting casing to bottom. The casing could only be advanced by drilling beneath it and letting it fall as the hole was cleaned out below. Several twist-offs occurred. Total of 176.5 hours were required to set casing by these methods. Summary of costs is as follows:

DiKor	$ 3,254.31
Sprague & Henwood (hourly)	4,412.50
Total Cost	$ 7,666.81
Amount claimed for reimbursement (Part IV)	3,340.00
Unclaimed portion	$ 4,326.81

The hole was subsequently drilled to 1,457 feet with NX wire line tools. Several minor cavities were encountered necessitating the reduction to BX. The hole was then drilled BX from 1,457.7 to 2,141 feet at the end of this period.

Respectfully submitted,

Joseph A. Porter

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Sept. Oct. Nov. Dec. 1973

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $ ~~56,450~~ 114,100.

Gov't. Participation ~~35~~ $ ~~19,757~~ 50 57,094.

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.

Address Shearman and Sterling, 53 Wall St. New York, NY 10005

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$		$		$
Dozing, hours	20	250.00	20	250.00	20	250.00	20	250.00
Rotary demobil.	½	175.00	½	175.00	0.5	175.00	0.5	175.00
Drilling	1937	8248.00	1937	8248.00	1937	8248.00	1937	8248.00
Service time	380	7435.00	380	7435.00	380	7435.00	380	7435.00
Mud & cement	139.5	825.96	139.5	825.96	194	825.95	194	825.95
Casing, surface	296.6	444.90	296.6	444.90	296.6	444.90	296.6	444.90
Core drilling, mobil	½	400.00	½	400.00	0.5	400.00	0.5	400.00
Set-up/casing	29	565.50	29	565.50	29	565.50	29	565.50
NX 500-1000	324	1603.80	324	1603.80	324	1,603.80	324	1,603.80
1000-1500	457.7	2517.35	457.7	2517.35	457.5	2517.35	457.7	2517.35
BX 500-1000	500	2850.00	500	2850.00	500	2850.00	500	2850.00
1000-1500	727.3	4500.96	727.3	4500.96	727.3	4500.96	727.3	4500.96
1500-2000	763	4763.00	763	4763.00	763	4763.00	763	4763.00
2000-2500	141	937.65	141	937.65	141	937.65	141	937.65
Casing shoes	3	583.44	3	583.44	3	583.44	3	583.44
Reaming, hours	3	67.50	3	67.50	3	67.50	3	67.50
Inst./remove casing	10	195.00	10	195.00	10	195.00	10	195.00
Standby	3	56.25	3	56.25	3 hr.	56.25	3 hr.	56.25
Cement (hole stab.)	60	1170.00	60	1170.00	60 hr.	1170.00	60	1170.00
Wedge	1	230.63	1	230.63	1	230.63	1	230.63
Lost, damg. casing	110	319.00	110	319.00	110	319.00	110	319.00
Category (2)								
Geologist-Supervisor	3	4200.00	3	4200.00	3 mo	4,200.00	3 mo.	4,200.00
Assistant Geologist	1	700.00	1	700.00	1 mo.	700.00	1 mo.	700.00
Sampler	2	247.57	2	247.57	2 mo	247.57	2 mo	247.57
Category (3)								
Core boxes	342	427.50	342	427.50	342	427.50	342	427.50
Category (7)								
Office-secretarial	3	450.00	3	450.00	3 mo.	450.00	3 mo.	450.00
TOTALS		$44,164.01		$44,164.01		$44,164.00		$44,164.00

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 18, 1974 *Payee Hicks Dome Account
Joseph A. Porter

Per Joseph A. Porter Title Geologist

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

A willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction is a criminal offense. (U. S. Code, Title 18, Sec. 1001).

(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date 7/29/74

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

(SEE OTHER SIDE)

Hicks Dome Account
Sept., Oct., Nov., Dec. 1973

Stage III

1)

Claimed	$25.96
Allow	$25.95
Disallow	$0.01

One cent Arithmetical error on Invoice No. 6, pg. 3, Boyles Bros., Oct. 31, 1973. Number of sacks claimed (139.5) does not agree with total billed on Invoices No. 6, pg. 3 plus total billed on Invoice No. 7, pg. 1, Nov. 30. 1973.

2) Wedge. This item, analogous to a casing shoe, and used to deflect the drill rods past a cavity at about 330 feet, saved the hole from being abandoned. I recommend that it be allowed as claimed.

Box 4/7

Phone (618) 285-6685

Joseph A. Porter

Geologist

Rosiclare, Illinois
62982

June 20, 1974

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U.S. Geological Survey
National Center, Mail Stop 920
12201 Sunrise Valley Drive
Reston, VA 22092

Re: OME-6873 (Fluorspar, et al.)
Hicks Dome Account
Hicks Dome Property
Hardin County, Illinois

Dear Mr. Kirkemo:

Enclosed is a composite voucher for the months of September, October, November and December, 1973, for Stage III of the contract. For the sake of simplicity in presentation the material is submitted in four parts. These are:

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FSB-3

Part III To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-8 (completed).
FSB-3

Part IV To supplement Part I. Consists of costs incurred, explanatory footnotes and pertinent invoices relating to OME-9.
Hamp 8

Part V To supplement Part I. Consists of costs incurred in Categories 2, 3 and 7 during this period.

Due to difficulties in obtaining copy work only one copy of the supplementary material is included.

Hopefully this will facilitate interpretation of the voucher.

Since none of the holes for this stage were completed, the summary of the geology will be included with the next voucher.

As discussed several times by phone during this period of time, both holes encountered considerable difficulty in getting started. Actual costs greatly exceed those allowed in the contract. The following summarizes cost incurred, amount claimed and the total amounts not claimed here:

FSB-3

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Excess	$ 3,357.15

FSB-3

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Total Invoiced Cost	$ 7,669.30
Claimed for reimbursement	5,459.40
Excess	$ 2,209.90

Hawp-8

OME-9

Total Invoiced Cost	$ 7,666.81
Claimed for reimbursement	3,340.00
Excess	$ 4,326.81

Total excess of cost not claimed $ 9,893.86

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Please advise if you need further documentation or explanation of the voucher or the supplementary material.

Sincerely,

Joseph A. Porter

cc. J.L. Carroll
Enclosures

OPERATOR'S REPORT

Sept. Oct. Nov. Dec. 1973

Considerable difficulties were encountered in drilling OME-8 and OME-9. The first attempt to drill OME-8 was abandoned and the hole was moved twenty feet where the hole was completed. Problems on both holes were due principally to cavities. These holes are discussed separately.

OME-8 (FSB-3) - Abandoned

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The cavity was initially filled with rubble and chert cavings. As drilling progressed from 320 feet to 760 feet most of the cuttings apparently accumulated in this cavity and several smaller cavities below. Considerable difficulty was encountered in getting the bit past 320 feet when bit trips were made.

An attempt would have been made to set 4 inch casing through the cavity using the air rotary drill. However, the casing was not readily available. Contractor inventories of NX casing were also insufficient in as much as what was available was being used in holes then being drilled. It was decided to move the rotary to the next hole, OME-9, and set the NX casing in OME-8 with the core drill.

Initial attempts to set NX casing were unsuccessful. An attempt was made to wash the hole out using a tricone bit and drill mud. This was also unsuccessful. NX casing was advanced to approximately 380 feet by washing in front of the casing with a 2 15/16 inch rock bit and then washing the casing down. The casing was advanced to 380 feet. The NX casing subsequently twisted off in the cavity leaving 60 feet of NX casing and a casing shoe in the hole. Because of the caving cuttings and rubble it was impossible to fish the tools.

An attempt was made to wedge the hole at 321 feet and redrill from that point. Because of the openings and the size of the hole, it was impossible to get cement to stay around the wedge so that the hole could be drilled. Several attempts were made to cement. Both were unsuccessful.

MARCH 1968

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I Page 1

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Jan. Feb. March 1974

Operator's Name Hicks Dome Account c/o Gilbert Kerlin, Esq.

Address Shearman and Sterling, 53 Wall St. New York, NY 10005

Docket No. OME- 6873

Contract 14-08-0001 2306

Contract Amount $ ~~56,480~~ 114,[illegible]00

Gov't. Participation % ~~35~~ 50 $ ~~19,768~~ 57,0[illegible]

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (1)		$		$		$		$
Dozing, Hours	30	375.00	50	625.00	30	375.00	50	625.00
Wagon (transport)	22	88.00	22	88.00	22	88.00	22	88.00
Rotary (demobil.)	-	-	½	175.00	—	—	0.5	175.00
Drilling 0-500	1000	5000.00	2937	13,248.00	1000	5000.00	2937	13,248.00
Service time	20	445.00	400	7,880.00	20	445.00	400	7880.00
Mud	32.5	178.75	172	1.004.71	32.5	178.75	226.5	1004.70
Casing lost	739.5	1109.25	1036.1	1,554.15	739.5	1109.25	1036.1	1,554.15
Core drilling, mobil	-	-	½	400.00	—	—	0.5	400.00
Set-up/casing	20	390.00	59	955.50	20	390.00	49	955.50
Coring NX 500-1000	1000	5400.00	1324	7,003.80	1,000	5400.00	1324	7003.80
1000-1500	1000	5925.00	1457.7	8,442.35	1,000	5925.00	1457.7	8442.35
1500-2000	1000	6575.00	1000	6,575.00	1,000	6575.00	1000	6575.00
2000-2500	522	3902.90	522	3,902.90	522	3,902.90	522	3902.90
2500-3000	16	134.40	16	134.40	16	129.60	16	129.60
BX 500-1000	-	-	500	2,850.00	—	—	500	2850.00
1000-1500	-	-	727.3	4,500.96	—	—	727.3	4,500.96
1500-2000	237	1611.60	1000	6,374.60	237	1,611.60	1000	6,374.60
2000-2500	1197	8335.05	1338	9,272.70	1197	8,335.05	1338	9,272.70
2500-3000	397	3176.00	397	3,176.00	397	3176.00	397	3,176.00
Excess bit costs	1401	913.90	1401	913.90	902	586.30	902	586.30
Casing shoes	-	-	3	583.44	—	—	3	583.44
Reaming	-	-	3	67.50	—	—	3	67.50
Instal/remove casing	9	175.50	19	370.50	9	175.50	19	370.50
Standby (survey)	62	1162.50	65	1,218.75	62	1162.50	65	1218.75
Cement (hole stab.)	-	-	60	1,170.00	—	—	60	1170.00
Wedge	-	-	1	230.63	—	—	1	230.63
Lost/damg. NX casing	20	58.00	130	377.00	20	58.00	130	377.00
TOTALS (for page 1)		$44,955.85		$83,094.78		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account

Per Joseph A. Porter Title Geologist

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(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____

PART I Page 2

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Jan. Feb. March 1974

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $ ~~56,480~~ 114,180.00
Gov't. Participation % ~~35~~ 50 $ ~~19,768~~ 57,090.00

Operator's Name Hicks Dome Account
Address c/o Gilbert Kerlin, Esq.
Shearman and Sterling, 53 Wall St.
New York, NY 10005

COST ITEMS (FROM EXHIBIT A)	FOR OPERATOR'S USE: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS	FOR GOVERNMENT USE ONLY: THIS MONTH UNITS	THIS MONTH COSTS	TO DATE UNITS	TO DATE COSTS
Category (2)		$		$		$		$
1 Supervisor-Geol.	2.5	3500.00	5.5	7700.00	2.5	3,500.00	5.5	7,700.00
2 Assistant Geol.	3	2100.00	4	2800.00	3	2100.00	4	2,800.00
Sampler	-	-	2	247.57	—	—	2	247.57
Category (3)								
3 Core boxes	596	745.00	938	1172.50	596	745.00	938	1,172.50
Sample bags	73	36.50	73	36.50	73	36.50	73	36.50
Category (7)								
4 Secretarial-Office	3	450.00	6	900.00	3	450.00	6	900.00
Survey Instr. rent	1	513.56	1	513.56	1	513.36	1	513.36
CaF2 Spec. Ion	26	58.00	26	58.00	26	58.00	26	58.00
CaF2 (wet assay)	73	292.00	73	292.00	73	292.00	73	292.00
BaSO4 (wet assay)	73	219.00	73	219.00	73	219.00	73	219.00
Other assays	58	189.00	58	189.00	58	189.00	58	189.00
Spectro. analysis	21	210.00	21	210.00	21	210.00	21	210.00
totals (page 2)		8313.06		14338.13				
Totals Stage III (allowable at 50%)						52,936.31		97,100.31
Stage I (allowable at 50%)								73,385.59
Stage II (allowable at 35%)								63,676.52
TOTALS		$53,268.91		$97,432.91		$52,936.31		$234,162.42

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account

Per Joseph A. Porter Title Geologist

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(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____ (SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____ (SEE OTHER SIDE)

RRS,

REMARKS

1) Claimed $134.40
Allow 129.60
Disallow $4.80

Contract allows $8.10/ft for drilling NXWL from 2500 to 3000 ft.

2) Claimed 913.90
Allow 586.30
Disallow 327.60

Allowable footage for excess bit wear appears to be 902 ft. rather than 1401 ft. as claimed according to Christensen Diamond Products Co. invoices F.R. 19261, 19262, 19263, 19264, and 19265 all dated Feb. 7, 1974. May be revised if the invoices are misinterpreted or additional data furnished. Many errors in Christensen invoices.

3) Claimed 513.56
Allow 513.36
Disallow 0.20

Boyles Bros. invoice 33-3, March 4, 1974 indicates rental at $513.36.

Total disallowances $332.60

OPERATOR'S MONTHLY REPORT

The Operator, under an Office of Minerals Exploration contract, is required to report monthly to the Government. The report consists of two parts.

FIRST, the Operator's Monthly Voucher on Form 9-1648 listing the project costs incurred and claimed by the Operator is the voucher basis for ayment of the Government's share of the cost.

SECOND, the Operator's Narrative Report is a concise description of the work performed, results accomplished, and any unusual situations ncountered, illustrated and supported by engineering-geological maps or sketches, drill hole logs, assay reports, etc., as pertinent.

The Operator submits the original and three copies of each of the two sections of this report to the OME regional Field Officer at the end of each onth during the life of the contract.

PREPARATION OF OPERATOR'S MONTHLY VOUCHER, FORM 9-1648

In the left hand column list the items for which costs were incurred during the month, and also the items for which costs were previously reported. or items previously reported, show only UNITS TO DATE and COSTS TO DATE. Items listed should conform to Exhibit A of the contract (Estimated osts of the Work). The total of COSTS THIS MONTH followed by the Operator's signature constitutes a claim for payment of the Government's hare of the costs. The Operator or his agent must sign the certification in the lower left corner.

Except for amounts claimed under "fixed unit costs" provisions of the contract, all costs claimed in this voucher must be supported by docu — nentary evidence consisting of: (a) certified copies or transcripts of payrolls which list each employee, wage rate, period of employment, gross earnings, and net earnings; (b) original or certified copies of invoices, statements of accounts, or purchase orders which indicate items of materials or services, quantities, unit prices, total charges, and payment terms; and (c) certified memoranda of the Operator for such items as unemployment taxes, employee's liability insurance, and depreciation of Operator-owned equipment. The certification may be stated thus, "Certified True Copy", followed by he signature of the Operator or his agent. One copy of each document should accompany the original of this voucher.

The requirement for submitting documentary evidence of claimed costs may be waived by the OME regional Field Officer if he determines that it is racticable for an Operator to submit this material. In any case of waiver of this requirement an "on-site" audit by an OME auditor is mandatory prior to nt of the final Operator's Monthly Voucher.

EXPLORATION CONTRACT
HICKS DOME ACCOUNT
OME-6873

AMENDMENT NO. 4

It is agreed this ~~31st~~ day of ~~January~~, 1974, between the United States of America, acting through the Department of the Interior, U.S. Geological Survey, hereinafter called the "Government", and Gilbert Kerlin, Robert G. Goelet, Francis Goelet, d/b/a Hicks Dome Account, hereinafter called the "Operator", that Exploration Contract 2306 (OME-6873), dated September 26, 1972, as amended, ~~by Amendment No. 1 dated June 29, 1973,~~ is further amended effective ~~August 29, 1973~~, as follows:

1. The date fixed by Article 1(a) of the Contract as amended by Amendment No. 1 for completion of the work is extended from fifteen (15) to twenty-one (21) months from the date of the Contract, or until June 26, 1974.

1. Article 1(b) of the Contract, as amended by Amendment No. 1, page 1, is further amended in its entirety to read as follows:

"(b) The total allowable cost of the work set forth in Exhibit A is $276,110.00. The Government will contribute 50 percent of the allowable costs as they are incurred in Stages I, ~~and~~ III, and IV and 35 percent in Stage II, in a total sum not in excess of $118,558.00 in accordance with the provisions of Articles 3, 4, 5, and 6, and SUMMARY in Exhibit A in Amendment No. 4. 'Costs incurred' means costs that have been paid or have become due and payable or that the Government determines have become obligations."

$276,110.00

2. Article 1(c) of the Contract as amended by Amendment No. 2, page 1, is further amended in its entirety by deleting the existing paragraph and substituting in lieu thereof the following:

"(c) Interest computation.--Simple interest at the rates specified in (i), (ii), ~~and~~ (iii), and (iv) below shall accrue from the dates Federal funds are made available until the period specified for payment of royalty expires, or until the amount of Federal funds contributed is fully repaid with interest, whichever occurs first:

(i) 8-1/4 percent on the Government's contribution not in excess of $47,725.00, toward allowable cost for work performed.

(ii) 9 percent on the Government's contribution over $47,725.00 but not in excess of $67,493.00 toward allowable cost for work performed.

(iii) 8-3/4 percent on the Government's contribution over [illegible].00 but not in excess of $113,558.00 toward allowable cost [illegible] work performed."

(iv) ____ percent on the Government's contribution [illegible] 550.00 but not in excess of $118,558.00 [illegible] cost for work performed."

3. Article 16 of the Contract is further revised to read as follows:

"The Government shall not make or be obligated to contribute to the cost of work performed under the individual stages of this contract until the Operator has submitted and the Government has approved a performance bond or bonds adequate to cover a total penal sum of $118,558.00."

4. Exhibit A of the Contract is further amended as follows:

a. Under the heading "General Provisions", the new paragraph added by Amendment No. 1, page 2, ~~is~~ and revised, to read as follows: by Amendment No. 2, page 2, is further revised

"The work shall be divided into four ~~three~~ stages. Government funds not expended in prior ~~the first or second~~ stages may be applied to the costs incurred in the succeeding stages. Estimated numbers of units such as hours, months, feet, samples, and total costs of individual categories and total costs for each stage may be exceeded to the extent that funds from the preceding stages are made available."

b. Under the heading "Description of the Work", the first paragraph, as revised by Amendment No. 1, and 2 page 2, ~~the first paragraph~~ is further revised to read as follows:

"The work shall consist of bulldozing access roads, preparing drill sites, and drilling four vertical diamond drill holes as Stage I of the Contract, ~~and~~ rotary and core drilling three vertical holes as Stage II, ~~and~~ about four vertical holes as Stage III of the Contract for an estimated drilling total on the three stages of about 28,000 feet, and analytical work and related services on samples from drilling in the deposit as Stage III of the Contract. The approximate locations of the holes are shown on Figure 1, revision 2. If it should be decided to deepen existing drill holes or to drill branch holes, reentry may be made for additional drilling, either vertically or wedging to a predetermined course."

c. Under the heading "Estimated Costs of the Work", ~~the existing section in Exhibit A of the Contract applies to Stage I, the section added by Amendment No. 1 applies to Stage II, and~~ a new section for Stage ~~III~~ IV is added to read as follows:

"Stage IV

Actual costs

Category (7) Miscellaneous

Selection, field preparation, and data interpretation

2 months at *500.00/month[1] *1,000.00

Analytical work at prices ~~[illegible]~~ per analysis as follows:

Niobium (colorimetric)	*5.00
CaF_2	3.00
(Less than 10% F)	2.00
Lead, zinc (each)	2.00
Beryllium	3.00
$BaSO_4$	4.50
Rare earth elements, niobium, and thorium, per element	1.00
Emission spectrographic ~~analysis~~ scans	9.00
Lab preparation of samples (if under 1 lb. add *0.25/lb.)	0.70

3000 samples at

price per analy[illegible] [illegible].00

Total Category (7) [illegible]0,000.00

Government Participation [illegible]000.00

[1] Funds may be applied [illegible] defray

SUMMARY

Total Estimated Cost of Stage I			$95,450.00
Government Participation at 50%			$47,725.00
Total Estimated Cost of Stage II			$56,480.00
Government Participation at 35%			$19,768.00
Total Estimated Cost of Stage III			$114,180.00
Government Participation at 50%			$57,090.00
Total Estimated Cost of Stage IV			10,000.00
Government Participation at 50%			5,000.00
Total Estimated Cost of Project			276,110.00
Government Participation:			
Total estimated Stages I, II, III, IV		$129,583.00	
Less:			
Stage I, estimate	$47,725.00		
Stage I, probable	$36,700.00		
Available for Stages III, IV		11,025.00	
Total			$118,558.00

This amendment increases the estimated total cost of the Contract by $~~114,180.00~~ 10,000.00 and the amount of Government participation by $~~46,095.00~~ 5,000.00.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I Page 2

Stage III

OPERATOR'S MONTHLY VOUCHER For Month of Jan. Feb. March 1974

Docket No. OME- 6873
Contract 14-08-0001 2306
Contract Amount $ 56,480
Gov't. Participation % 35 $ 19,768

Operator's Name Hicks Dome Account
Address c/o Gilbert Kerlin, Esq.
Shearman and Sterling, 53 Wall St.
New York, NY 10005

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (2)		$		$		$		$
1 Supervisor-Geol.	2.5	3500.00	5.5	7700.00				
2 Assistant Geol.	3	2100.00	4	2800.00				
Sampler	-	-	2	247.57				
Category (3)								
3 Core boxes	596	745.00	938	1172.50				
Sample bags	73	36.50	73	36.50				
Category (7)								
4 Secretarial-Office	3	450.00	6	900.00				
Survey Instr. rent	1	513.56	1	513.56				
CaF_2 Spec. Ion	26	58.00	26	58.00				
CaF_2 (wet assay)	73	292.00	73	292.00				
$BaSO_4$ (wet assay)	73	219.00	73	219.00				
Other assays	58	189.00	58	189.00				
Spectro. analysis	21	210.00	21	210.00				
totals (page 2)		8313.06		14338.13				
TOTALS		$53,268.91		$97,432.91		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account

Per Joseph A. Porter Title Geologist

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(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

PART I Page 2

Stage III

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New York, NY 10005

FOR OPERATOR'S USE					FOR GOVERNMENT USE ONLY			
COST ITEMS (FROM EXHIBIT A)	THIS MONTH		TO DATE		THIS MONTH		TO DATE	
	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS	UNITS	COSTS
Category (2)		$		$		$		$
1 Supervisor-Geol.	2.5	3500.00	5.5	7700.00				
2 Assistant Geol.	3	2100.00	4	2800.00				
Sampler	-	-	2	247.57				
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totals (page 2)		8313.06		14338.13				
TOTALS		$53,268.91		$97,432.91		$		$

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Hicks Dome Account
Joseph A. Porter

Per _____ Title Geologist

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(INSTRUCTIONS ON REVERSE)

Approved as noted, subject to field examination and audit.

Signature _____ OME Field Officer Date

Approved for: $ _____
(SUBJECT TO AUDIT)

Signature _____

Date _____ Vou. No. _____
(SEE OTHER SIDE)

OPERATOR'S REPORT

Sept. Oct. Nov. Dec. 1973

Considerable difficulties were encountered in drilling OME-8 and OME-9. The first attempt to drill OME-8 was abandoned and the hole was moved twenty feet where the hole was completed. Problems on both holes were due principally to cavities. These holes are discussed separately.

OME-8 (FSB-3) - Abandoned

This hole was first drilled with air rotary to a total depth of 760 feet. Solid rock was encountered at 107.5 feet and 7 inch casing was set. The hole was then drilled with a down-hole hammer and tricone rock bits to a total depth of 760 feet.

Several cavities were encountered between 107.5 and 300 feet. They caused no real problems for the rotary. A large cavity was encountered between 300 and 320 feet. At this point all cuttings were lost.

The cavity was initially filled with rubble and chert cavings. As drilling progressed from 320 feet to 760 feet most of the cuttings apparently accumulated in this cavity and several smaller cavities below. Considerable difficulty was encountered in getting the bit past 320 feet when bit trips were made.

An attempt would have been made to set 4 inch casing through the cavity using the air rotary drill. However, the casing was not readily available. Contractor inventories of NX casing were also insufficient in as much as what was available was being used in holes then being drilled. It was decided to move the rotary to the next hole, OME-9, and set the NX casing in OME-8 with the core drill.

Initial attempts to set NX casing were unsuccessful. An attempt was made to wash the hole out using a tricone bit and drill mud. This was also unsuccessful. NX casing was advanced to approximately 330 feet by washing in front of the casing with a 2 15/16 inch rock bit and then washing the casing down. The casing was advanced to 380 feet. The NX casing subsequently twisted off in the cavity leaving 60 feet of NX casing and a casing shoe in the hole. Because of the caving cuttings and rubble it was impossible to fish the tools.

An attempt was made to wedge the hole at 321 feet and redrill from that point. Because of the openings and the size of the hole, it was impossible to get cement to stay around the wedge so that the hole could be drilled. Several attempts were made to cement. Both were unsuccessful.

Because of the fish in the hole, bad caving ground and the inability to wedge past the fish it was decided to abandon the attempt to set casing and move.

It is possible that the decision to abandon should have been made earlier. However, at the time it was felt that a short move would (and did) encounter the same difficulties and it was desirable to save the 760 feet of hole that had already been drilled.

Amount claimed on Part II of the voucher totals $9,196.46. Actual cost incurred is as follows:

DiKor	$ 3,254.31
Boyles (hourly)	6,201.00
Materials	2,852.30
Total Cost	$12,376.61
Amount claimed for reimbursement	9,019.46
Unclaimed portion	$ 3,357.15

During this period of time, Boyles Bros. assigned their field superintendent, J.D. Conway, to the job in order to be sure best efforts were made to set the casing.

OME-8 (FSB-3) - Completed

A rotary drill was not readily available to start another hole. Therefore it was decided that it would be simpler to attempt to drill the hole using the diamond drill. Due to cavities this hole also encountered considerable problems between 0 and 333 feet. The hole was drilled with a tricone bit to 105.1 feet where solid rock was encountered. Four inch casing was set to this point. Various small cavities with caving ground were encountered. At 270 feet caving ground necessitated that NX casing be set and the hole reduced to BX. An additional 10 feet of BX was drilled to 280 feet and NX casing was reamed that distance.

Various cavities were encountered down to 330 feet. The hole could only be advanced by drilling BX and reaming the casing behind the BX drill rods. Several attempts were made to drill with the rock bit through the NX casing. Two casing shoes were totally destroyed by the caving chert. These methods were successful in getting the hole to 333 feet. From this point on no particular problems were encountered.

As with the previous hole, the interval from 0-500 feet was very expensive and exceeded the amounts allowed for in the contract. Total costs were as follows:

Boyles (hourly)	$ 5,265.00
330-500'	951.90
Other & material	1,452.40
Total Cost	$ 7,669.30
Amount claimed for reimbursement (Part III)	5,459.40
Unclaimed portion	$ 2,209.90

A fault was encountered near the base of the Maquoketa. The fault zone consisted of breccia and cavities. The largest cavity was 30 feet thick and was encountered from 1333.5 to 1363.5. Since we had already reduced to BX an attempt was made to complete the hole. The hole was advanced to 1450 feet when the rods twisted off in the cavity. Numerous attempts were made to fish the tools. These were unsuccessful. One hundred and ten feet were lost.

A wedge was set 68 feet above the top of the cavity and the hole redrilled. Fortunately redrilling missed the cavity and the hole was drilled to a depth of 1,763 feet during this period.

OME-9 (Hamp 8)

This hole was also predrilled by using air rotary in September. Solid rock was encountered at 107.5 feet and 7 inch surface casing was set. The hole was then drilled by down-hole hammer and tricone to a total depth of 760 feet. As with OME-8 numerous cavities were encountered in the upper 300 feet of the hole. Few samples were recovered. Drill cuttings apparently filled various cavities throughout the upper 300 feet of the hole.

Casing was not available to set with the air rotary drill. Consequently it was decided to let the diamond drill contractors set the casing when coring was to begin. In order to speed up the work, a second diamond drill contractor, Sprague and Henwood, was mobilized to finish this hole. The drill was set up on October 25, 1973. By this time the cuttings in the cavities had time to flow back into the hole and effectively plug it.

Considerable difficulty was encountered in washing out the hole and setting casing to bottom. The casing could only be advanced by drilling beneath it and letting it fall as the hole was cleaned out below. Several twist-offs occurred. Total of 176.5 hours were required to set casing by these methods. Summary of costs is as follows:

DiKor	$ 3,254.31
Sprague & Henwood (hourly)	4,412.50
Total Cost	$ 7,666.81
Amount claimed for reimbursement (Part IV)	3,340.00
Unclaimed portion	$ 4,326.81

The hole was subsequently drilled to 1,457 feet with NX wire line tools. Several minor cavities were encountered necessitating the reduction to BX. The hole was then drilled BX from 1,457.7 to 2,141 feet at the end of this period.

Respectfully submitted,

Joseph A. Porter