



CONTACT INFORMATION
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Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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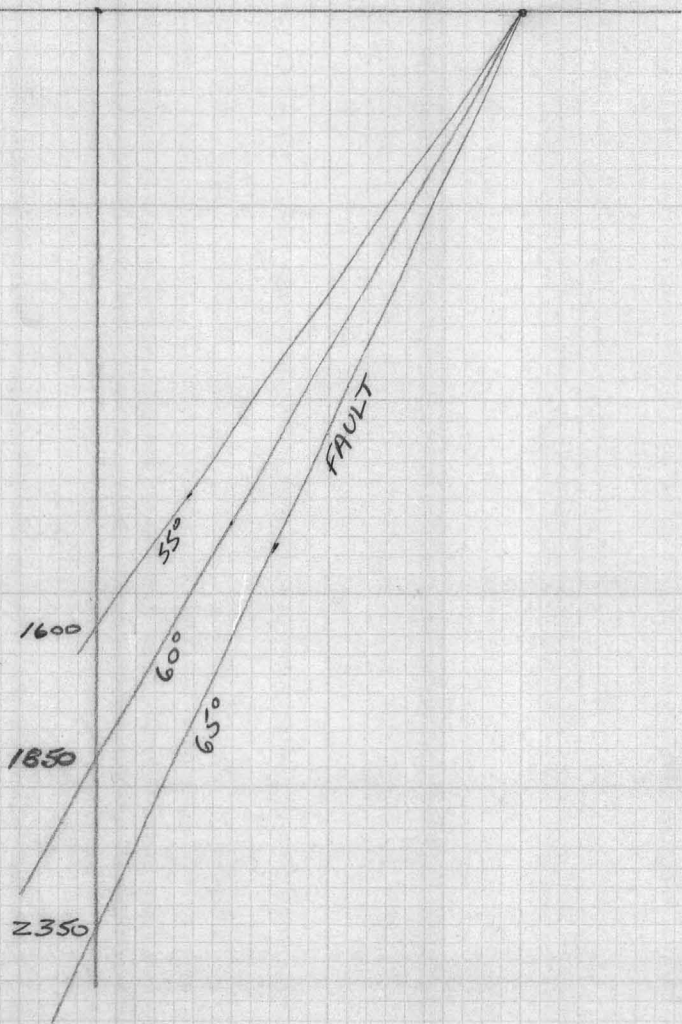
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The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

ES-31



2500

Reardon Hotel - cross r.r. tracks, 2 story
cement house at 4 corner just across tracks
201 Leonard Ave

{ 394- 2990 James Tout
Tiny Hestado - in Dos Cabezas has grazing
rights on mountain

MEMO

September 6, 1974

TO: Robert Holt
FROM: Bob Helming

SUBJECT: Status of drill hole ES-31 on the Nail Keg 3 claim.

The included sketch map indicates the location of drill hole ES-31 which was recently drilled to 1800 feet to fulfill assessment requirements on the Nail Keg, Bohemia and other contiguous claim groups.

So far as Essex knows there is an information gap in the area between the San Juan and PD ore bodies and adjacent to the Butte Fault on the north or footwall side. Information from this area could determine what, if any, connection exists between the San Juan and PD ore bodies at depth. From a somewhat more speculative viewpoint the data could aid in defining the shape, position and dimensions of the PD ore body since it is now apparent that PD is doing considerable underground drilling to answer those same questions. All of this data would significantly affect any future decisions concerning Essex land position in the Safford area.

The best way to test the area would have been to drill north of the fault on the San Juan property. This was impossible due to legal problems therefore the alternative was to collar a hole at the present site of ES-31 and attempt to drill through the fault to test the ground beneath the fault. The drill hole should penetrate the fault at approximately 2300 feet assuming a dip of 65 degrees for the fault. We can expect large fracture zones on both sides of the fault plane. The hole was rotary drill 5 3/4 inches diameter to 1800 feet and then filled with drilling mud. No casing was emplaced so the hole may be continued by rotary drill through the fault and then cased.

The biotite-chlorite alteration and mineralization of trace to locally moderate copper oxide in the hanging wall was anticipated based on prior knowledge of nearby outcrops and drill holes. A more detailed log will be prepared when assays are available.

Drill hole ES-31 was stopped on August 28 because the necessary money had been spent for assessment work on the claim group. I recommend Essex continue the hole as soon as a satisfactory drill can be contracted for the following reasons:

- 1) The hole is testing the last area on the claim group where there is insufficient data to form a reasonable geologic conclusion.

- 2) It seems very probable that Essex will maintain its property position for some time and will eventually have to do next years assessment work.
- 3) The longer the hole is left standing the less likely it can be reentered although it appeared to be in good condition.
- 4) The project geologist is presently located in Safford to handle the drilling.

Arguments against continuing the hole now are:

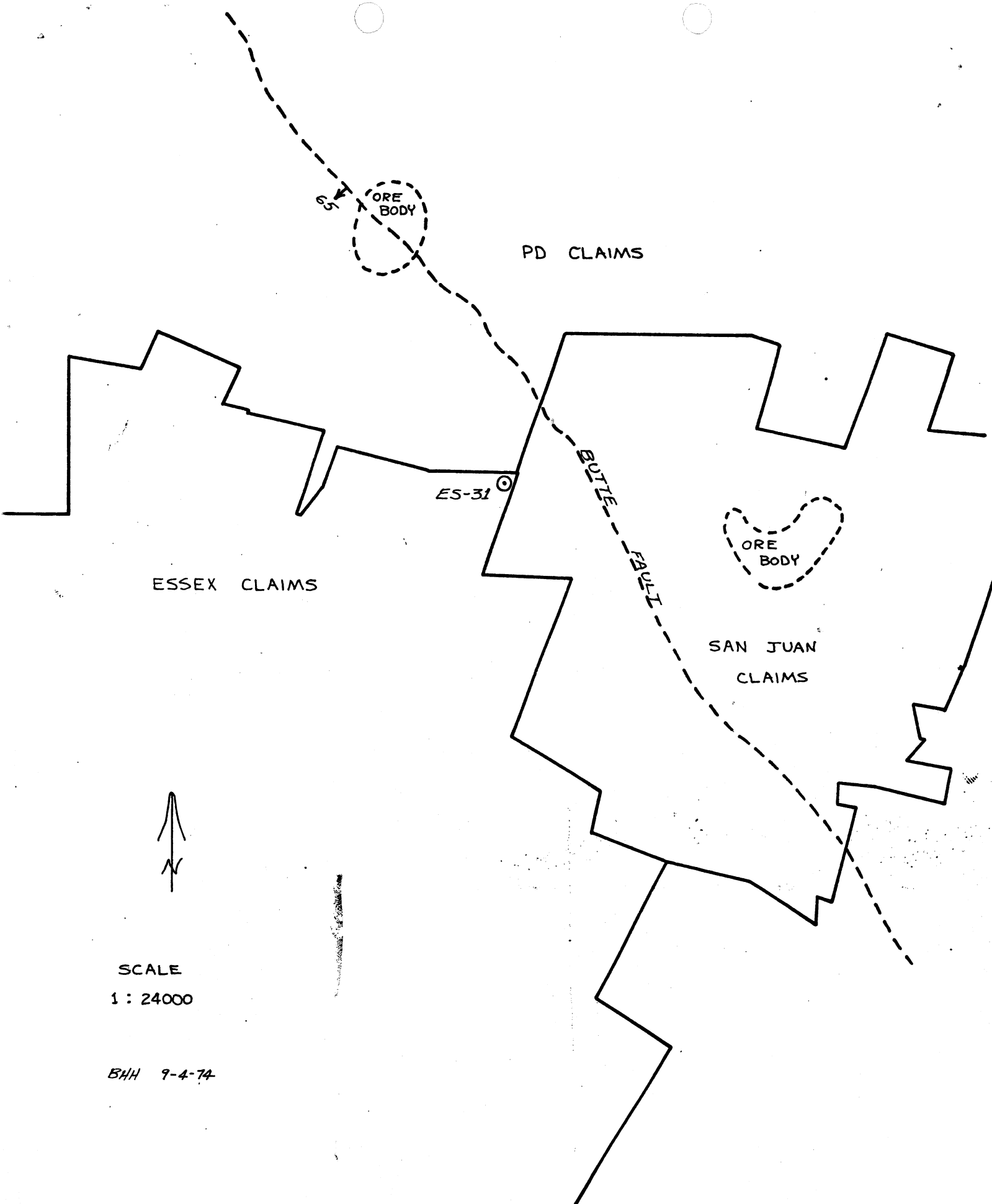
- 1) The claims may be dropped before we have to do next years assessment work.
- 2) No valid target exists and it is an expensive method of data collecting.
- 3) There is the unlikely possibility that PMC could subpoena the drill hole data because the hole is collared only 65 feet from the San Juan property.

Drilling through a major fault at depths exceeding 2000 feet will be a formidable task therefore nothing smaller than a Boyles Bros. DMX drill should be considered. Following are some cost estimates assuming the hole is rotaty drilled to 2600 feet, cased with 3½ inch pipe and cored Nx to 3500 feet.

Rotary drilling to 2600 feet	\$ 9,500
Additives, bits, water truck, etc.	\$ 6,000
Casing	\$11,700
Coring 2600 to 3500 feet	\$15,000
Additives, bits, water truck, etc.	\$ 8,000
Total	<u>\$50,200</u>

The cost of the hole should be compared to the semi-annual property payments for these claim groups of approximately \$65,000. Furthermore, if the hole is drilled now the major portion of the assessment work would be done until July of 1976.

Bob Helming
Project Geologist
Safford, Arizona



S

ORE
BODY

PD CLAIMS

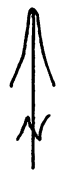
ES-31

BUTTE
FAULT

ORE
BODY

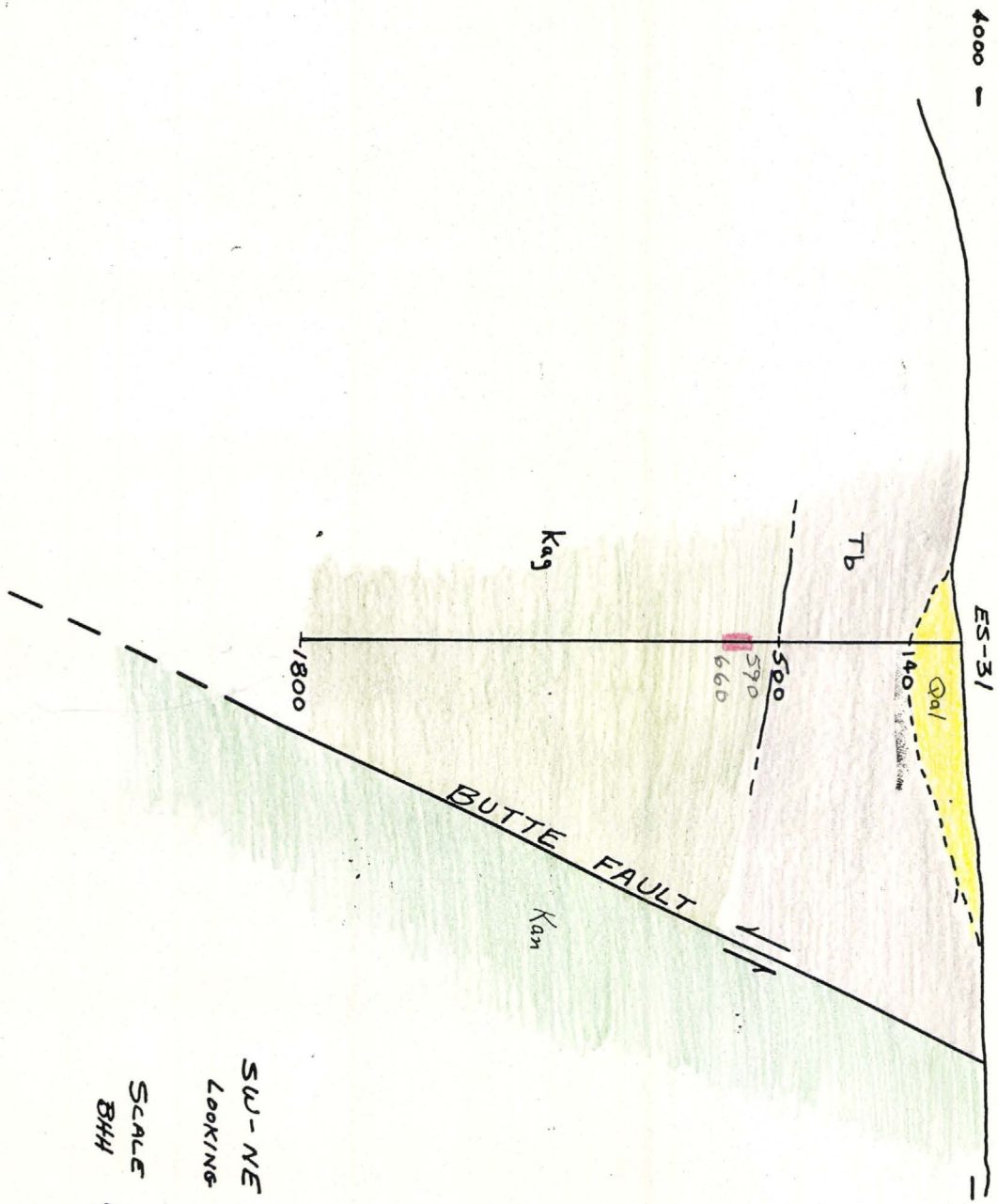
ESSEX CLAIMS

SAN JUAN
CLAIMS



SCALE
1 : 24000

BHH 9-4-74



SW-NE SECTION
 Looking NW
 SCALE 1" = 500'
 BHH 9-10-74

Property

Total 295 claims
Acres ≈ 5900

	<u>No. of Claims</u>		
• 1) Nail Keg (1-19)	19		
• 2) Nail Keg (20-24)	5		
• 3) Red Hill DROPPED 7-19-74	8		
• 4) Bohemia, Tecote + Foothill 59+60	26-2-2		
• 5) Coffee Cochino	3-2		
• 6) Flat Top	39		
• 7) Melody DROPPED 7-19-74	30		
• 8) Luger	8		
• 9) Big Ben	14	—	DH
10) Bardwell	3	—	
• 11) Lead Hill	2	—	BH
• 12) Key	8	—	DH
13) Mesquite			
• 14) Copper Chief	7	—	DH
• 15) Sandwash	2		
• 16) Pickup	1		
17) Soto State Lease	1 (?)	—	
• 18) Bold DROPPED 7-19-74	2		
19) Big Bird (center)			
• 19) Big Bird 51	} (40) 5		
• 19) Copper Flat			
20) San Juan	84		
21) Jets			
• 22) Knob Hill - Blue Bell	4	—	DH
• 23) Essex New Claims 71/72	14		
• 24) Essex New Claims 72/73	4		

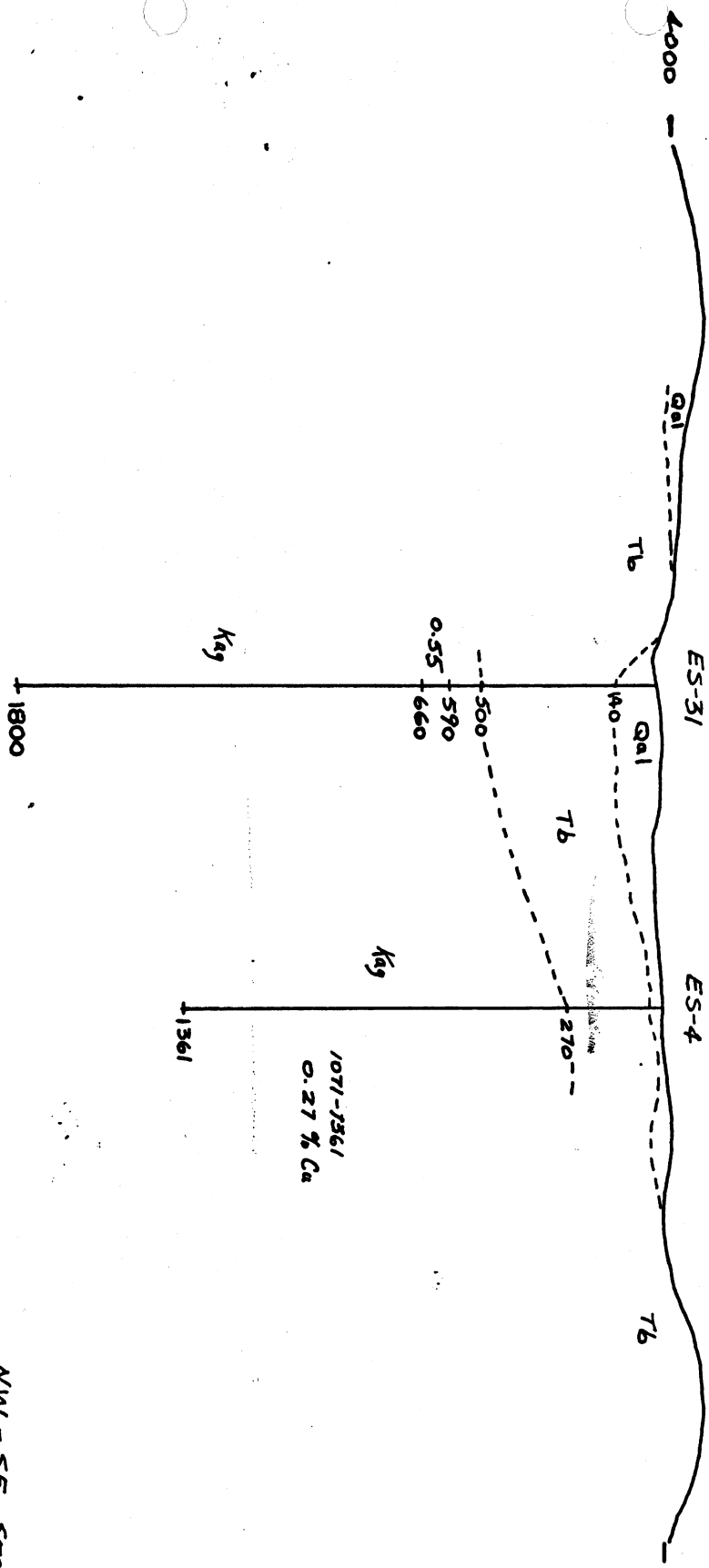
295
500

N

139 optioned claims

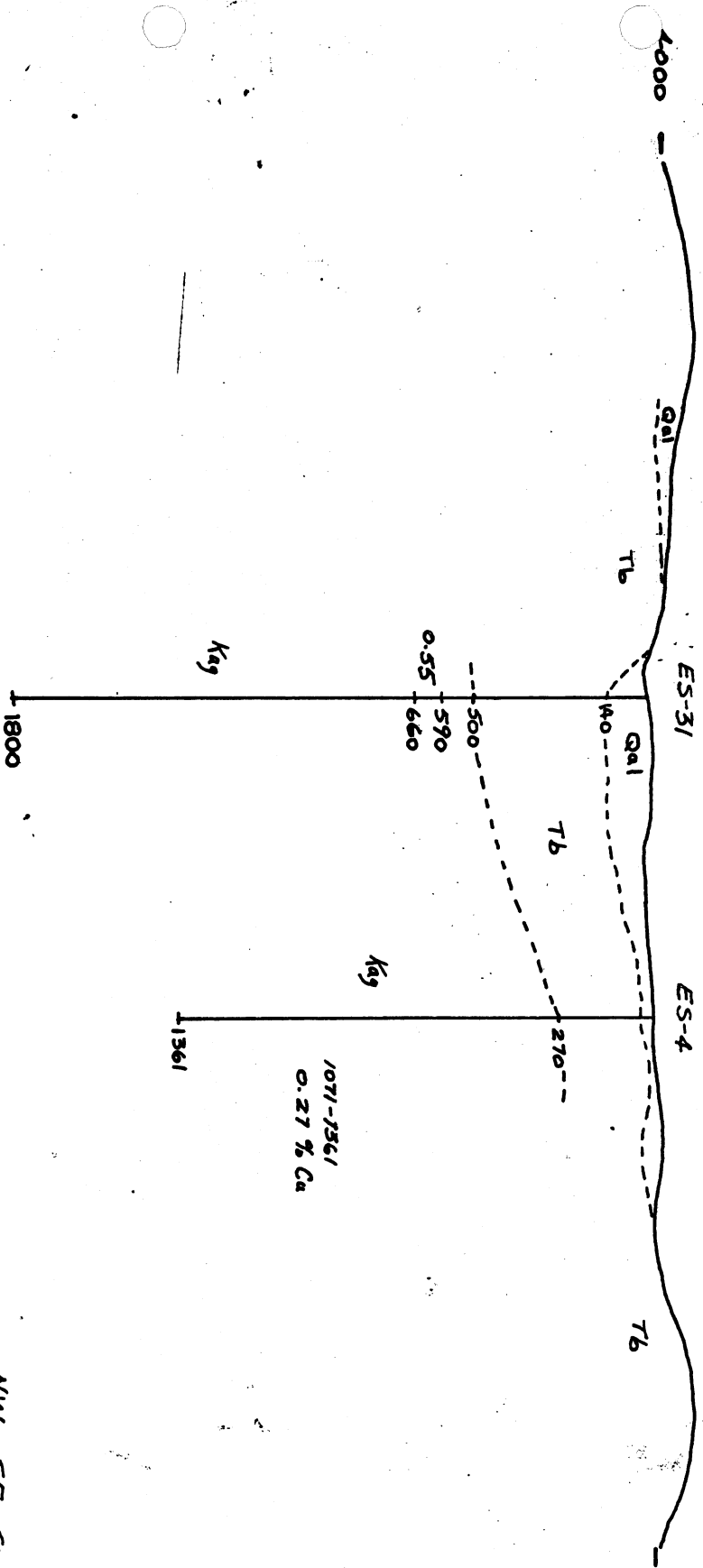
after February, 1975, if all options are renegotiated that expire in February, the semi-annual payments will be:

$$139 \text{ claims} \times 6 \text{ months} \times \$100 \text{ per month} = \$83,400$$



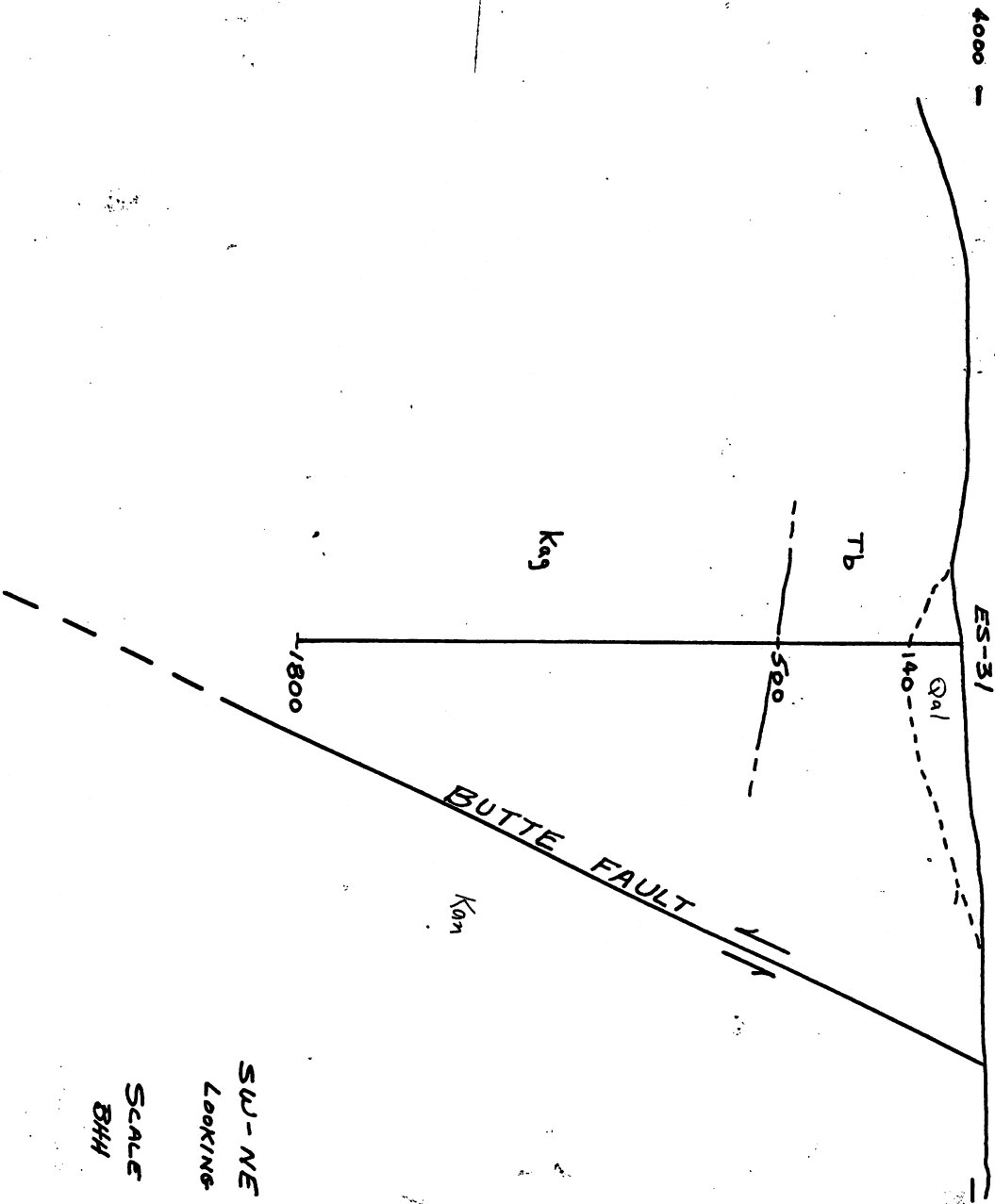
NW - SE SECTION
 LOOKING NE

SCALE 1" = 500'
 BHH 9-10-74



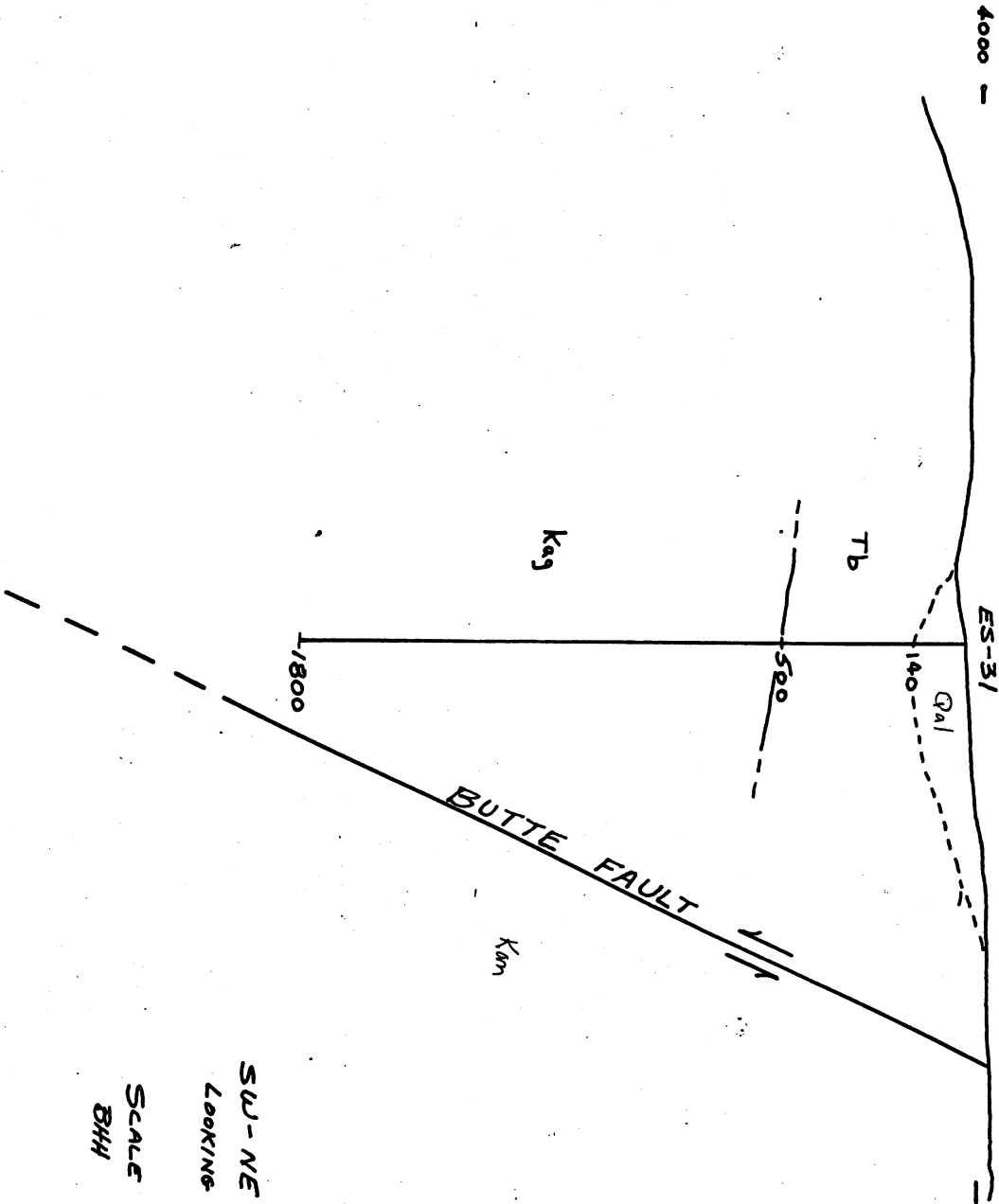
NW - SE SECTION
 Looking NE

SCALE 1" = 500'
 BHM 9-10-74

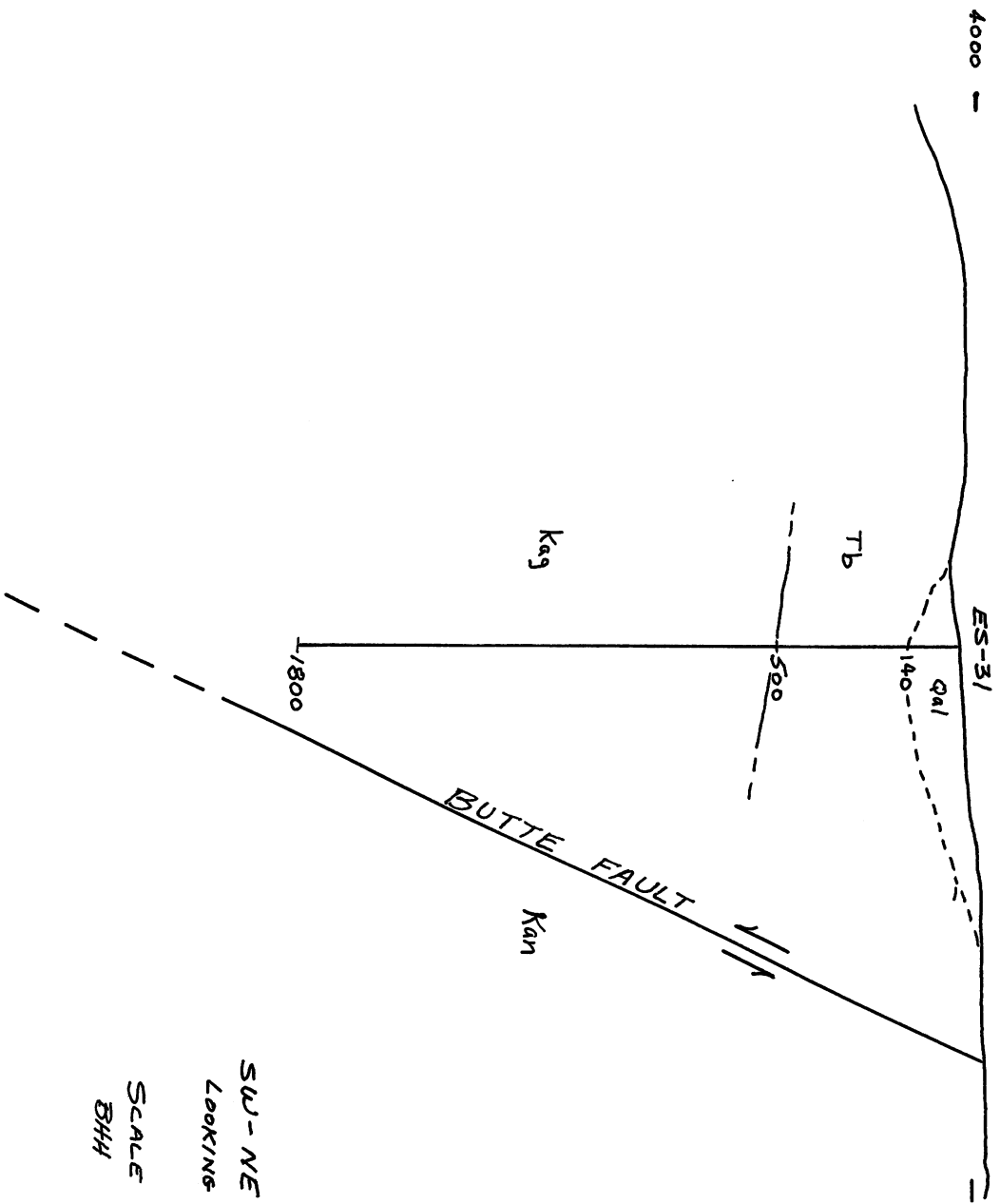


SW-NE SECTION
Looking NW

SCALE 1" = 500'
BHH 9-10-14

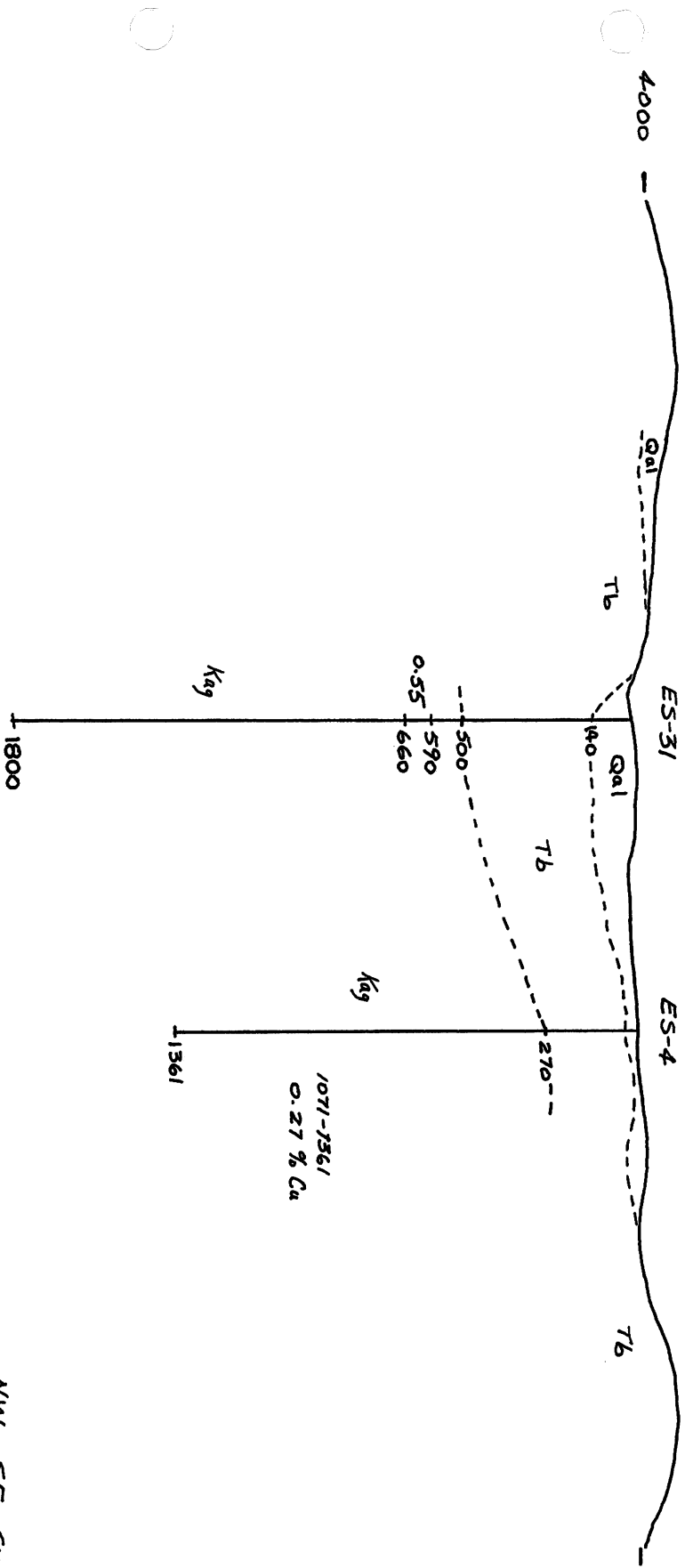


SW-NE SECTION
 Looking NW
 SCALE 1" = 500'
 BHH 9-10-74



SU-NE SECTION
 Looking NW

SCALE 1" = 500'
 BHH 9-10-74



NW - SE SECTION
 Looking NE

SCALE 1" = 500'
 BHH 9-10-74

DRILL HOLE SAMPLES

PROPERTY DISTRICT COUNTY STATE COUNTRY

HOLE NO. <i>ES-31</i>		CONTRACTOR		COLLAR COORD. N E		COLLAR ELEV.							
BEARING		INCLINATION		DEPTH		STARTED	STOPPED						
SAMPLE NUMBER	BIT SIZE	RECOVERY		DRILL RUN		INT.	ASSAYS						REMARKS
		FEET	%	FROM	TO								

				1300	1310		"	"	"	"	"	"	"	"	
				1310	1320		"	"	"	"	"	"	"	"	
				1320	1330		"	"	"	"	"	"	"	"	
				1330	1340		"	"	"	"	"	"	"	"	
<i>ES921</i>	<i>0.14</i>			1340	1350		"	"	"	"	"	"	"	"	
				1350	1360		"	"	"	"	"	"	"	"	
				1360	1370		"	"	"	"	"	"	"	"	
				1370	1380										
				1380	1390										
<i>ES922</i>	<i>0.17</i>			1390	1400										
				1400	1410										
				1410	1420										
				1420	1430										
				1430	1440										
				1440	1450										
				1450	1460										
				1460	1470										
				1470	1480										
				1480	1490										
<i>ES924</i>	<i>0.10</i>			1490	1500										
				1500	1510										
				1510	1520										
				1520	1530										
				1530	1540										
<i>ES925</i>	<i>0.14</i>			1540	1550										
				1550	1560										
				1560	1570										
				1570	1580										
				1580	1590										
<i>ES926</i>	<i>0.11</i>			1590	1600										
				1600	1610										
				1610	1620										
				1620	1630										
				1630	1640										
<i>ES927</i>	<i>0.13</i>			1640	1650										
				1650	1660										
				1660	1670										
				1670	1680										
				1680	1690										
<i>ES928</i>				1690	1700										
				1700	1710										
				1710	1720										
				1720	1730										
				1730	1740										
<i>ES929</i>	<i>0.10</i>			1740	1750										
				1750	1760										
				1760	1770										
				1770	1780										
				1780	1790										
<i>ES930</i>	<i>0.10</i>			1790	1800										

50% altered Kag, stronger biotite

80% dark altered Kag

85% dark, good biot, some chlor. use, weak limonite + hematite

} 110 samples

same as above - dirty sample mostly biotized Kag, with chlor, wk sericite, fine dissem hematite limonite mostly goethite + hematite, possible tr. cuprite 10% - 25% bleached or white qtz, traces native copper-rare

10-25% of material is limonite, hematite stained quartz fissure vein material

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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

January 14, 1975

BEN L. AUSTIN
 MANAGER DRILLING OPERATIONS

Essex International, Inc.
 1704 West Grant Avenue
 Tucson, Arizona 85705

Attention: Mr. Paul Eimon

Gentlemen:

We are pleased to submit the following quotation for rotary and core drilling on your deep hole project located near Safford, Arizona.

We propose to move a rotary drilling rig onto the drill site to rotary drill as deep as is practical, case the hole and move a core rig onto location to deepen the hole by coring.

1. Mobilization and Demobilization - ^{250.00}~~\$750.00~~ lump sum each rig.
2. Drilling Rates - Vertical Holes:

2.1 Rotary and Core Drilling:

	<u>Hammer or Rockbit</u>	<u>NX or BX</u>
0 to 500 feet	\$5.30	\$
500 to 1,000 "	6.40	
1,000 to 1,500 "	7.75	13.00
1,500 to 2,000 "	9.95	14.25
2,000 to 2,500 "		15.50
2,500 to 3,000 "		17.25
3,000 to 3,500 "		19.50
3,500 to 4,000 "		22.50
4,000 to 4,500 "		27.00
4,500 to 5,000 "		33.00
5,000 to 5,500 "		39.50
5,500 to 6,000 "		46.50

Essex International, Inc.

January 14, 1975

Page #2

- 2.2 Spot coring with the rotary rig will be charged at the rate of \$42.50 per hour plus the cost of bits.
- 2.3 A down-the-hole hammer will be charged at the rate of \$150.00 per week while in use.
- 2.4 While rotary drilling, if the rock should become so hard or other ground conditions be encountered such that the penetration rate falls below 50 feet per eight-hour shift over a period of three consecutive drilling shifts, Boyles will have the right to charge at the rate of \$42.50 per rig hour plus the cost of bits consumed from the end of the third qualifying shift until the hole is completed, or case the hole for coring.
- 2.5 Reaming to be charged at \$8.50 per foot.
3. The following items to be charged at the rate of \$37.50 per hour:
 - 3.1 Cementing and regaining lost circulation.
 - 3.2 Cleaning out and conditioning existing hole and making up core drilling string when changing over to core drilling.
 - 3.3 Surveying the hole plus \$125.00 per week for a Boyles owned instrument, or third party invoice cost, while the survey instrument is in use.
 - 3.4 Installing or retrieving casing.
 - 3.5 Set-up, moving between holes, and tearing down.
 - 3.6 Standby time at your request.
 - 3.7 Delays caused by actions on your part and not the fault of Boyles, including inaccessability to the drill site because of bad weather or other conditions not under the control of Boyles.
4. Water truck rental will be charged at the rate of \$390.00 per month for a Boyles Bros. owned two-wheel drive truck plus \$.35 per mile, or \$460.00 per month for a four-wheel drive truck plus \$.45 per mile, or third-party invoice plus 10% handling for outside rental. Water to be hauled by Boyles from your source of supply. If a steady driver is required, he will be charged at the rate of \$64.00 per eight-hour shift.
5. Core boxes, cement, drilling mud, mud additives, and lost circulation

Essex International, Inc.

January 14, 1975

Page #3

materials consumed will be charged at our published list prices plus 15% for mixing, handling, and transportation to the job site.

6. Casing will be invoiced at published list prices at time of installation in the hole. Any casing recovered will be credited at a mutually agreeable salvage value.
7. Drill roads and drill sites are to be constructed and maintained accessible to truck mounted drill rigs, supply trucks, and pickups free of cost to Boyles Bros. Any environmental responsibility relating to the construction, use or reclamation of same shall be the responsibility of Essex International. Boyles Bros. will, however, remove all trash and loose material, leaving drill sites in a clean and orderly condition.
8. Boyles Bros. certifies it has or will have licenses to do contract work in the state of Arizona. All other licenses, land and water use permits, environmental reports, state reports relating to hole plugging, etc. shall be the responsibility of Essex International. Boyles Bros. shall cooperate with and give technical assistance if requested for your compliance with these regulations.
9. Boyles Bros. shall drill at the location and to the depths specified by the representative of Essex International and shall be held harmless for all liability claims which may arise from normal activity related to this contract, including pollution of ground water or surrounding land from discharge of drill water and wastes. Boyles Bros. agree to accept responsibility for the irresponsible acts of their employees and for the liability which may result from these acts.
10. The prices in this schedule will remain firm for a period of 30 days from the date of the proposal; at which time, if the contract has not been accepted, Boyles Bros. reserves the right to revise any prices or conditions of this offer.
11. Boyles Bros. will invoice at the end of each calendar month for the work done during such period and the terms will be net 30 days. In the event payment is not made within these terms, a late payment charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged. It will be computed from the due date to the date we receive payment.

BOYLES BROS. DRILLING CO.

Essex International, Inc.
January 14, 1975
Page #4

Thank you for asking Boyles Bros. to quote on this work. We will look forward to receiving your instructions.

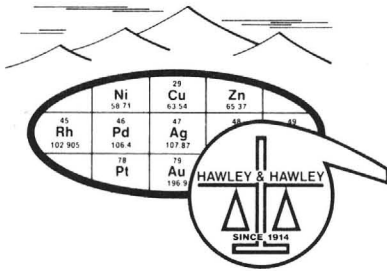
Yours very truly,



B. L. Austin

BLA:bg

cc: S. L. Mathews



SKYLARK LABS, INC.
 Hawley & Hawley, Assayers and Chemists Division
 1700 W. Grant Rd., P.O. Box 50106, Tucson, Arizona 85703
 (602) 622-4836

Charles E. Thompson
 Arizona Registered Assayer No. 9427

William L. Lehbeck
 Arizona Registered Assayer No. 9425

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Cu %								
1	01718	<0.01								
2	01719	<0.01								
3	01720	0.01								
4	01721	<0.01								
5	01722	0.01								
6	01723	<0.01								
7	01724	<0.01								
8	01725	0.01								
9	01726	0.01								
10	01727	<0.01								
11	01728	<0.01								
12	01729	0.01								

ES-35

TO:
 Essex International, Inc.
 1704 West Grant Road
 Tucson, Arizona 85705

REMARKS:
 Single analysis

CERTIFIED BY:



Attn.: Mr. Grover Heinrichs

DATE REC'D:
 3/31/75

DATE COMPL.:
 4/9/75

JOB NUMBER:
 750686

VERITY, SMITH, LACY, ALLEN & KEARNS, P. C.

VICTOR H. VERITY
LEO N. SMITH
JOHN C. LACY
KENNETH L. ALLEN
DESMOND P. KEARNS
ROGER W. TAYLOR
JOHN F. MUNGER
BRUCE F. RINALDI

ATTORNEYS AT LAW
902 TRANSAMERICA BUILDING
177 NORTH CHURCH AVENUE
TUCSON, ARIZONA 85701

TELEPHONE
(602) 623-6961

March 11, 1975

C
Mr. Fred E. Ferguson, Jr.
Evans, Kitchel & Jenckes, P.C.
Attorneys at Law
363 North First Avenue
Phoenix, Arizona 85003

Dear Fred:

O
Concerning your letter to John Lacy of this office dated January 24, 1975, I would appreciate your confirming that the "agreed survey line" mentioned in the third paragraph is the line described as "Adjusted Using PD Solar Bearing" in the attachment to Bill Bowen's letter to Grover Heinrichs of November 16, 1974.

P
This office has begun preparation of the documents mentioned in your January 24 letter, and this confirmation of the above will permit us to complete drafts for submittal to you for your and your client's review.

Very truly yours,

Leo N. Smith

LNS/dmd

cc: E. Grover Heinrichs

Y

1435 S. 10th AVE.

P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

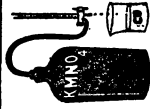
DUPLICATE

Certificate No. 59491

TUCSON, ARIZONA 85702

Mar. 12th 197⁵

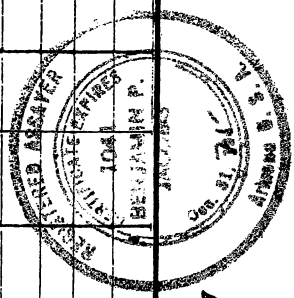
PHONE 622-0813



Exex International Inc

Sample Submitted by Mr.

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
01715	Trace			Trace			
16	0.005			0.02			
17	Trace			Trace			



* Gold Figured \$100.00 per oz. Troy
13.50
Charges \$

Very respectfully,
Ben. P. Jacobs

DIAMOND CORE DRILLING
 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: BOYLESKO
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BRANCH OFFICES
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 IRONWOOD, MICHIGAN
 SANTIAGO, CHILE
 cable: BOYLESBROS
 LIMA, PERU
 cable: BOYLESKOP
 MEXICO CITY, MEXICO
 telex: 001774546

January 14, 1975

BEN L. AUSTIN
 MANAGER DRILLING OPERATIONS

Essex International, Inc.
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Attention: Mr. Paul Eimon

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1. Mobilization and Demobilization - \$250.00 lump sum each rig.
2. Drilling Rates - Vertical Holes:

changed to on telephone conversation with Art Beattie 3-3-75

2.1 Rotary and Core Drilling:

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Essex International, Inc.

January 14, 1975

Page #2

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5. Core boxes, cement, drilling mud, mud additives, and lost circulation

Essex International, Inc.

January 14, 1975

Page #3

materials consumed will be charged at our published list prices plus 15% for mixing, handling, and transportation to the job site.

6. Casing will be invoiced at published list prices at time of installation in the hole. Any casing recovered will be credited at a mutually agreeable salvage value.
7. Drill roads and drill sites are to be constructed and maintained accessible to truck mounted drill rigs, supply trucks, and pickups free of cost to Boyles Bros. Any environmental responsibility relating to the construction, use or reclamation of same shall be the responsibility of Essex International. Boyles Bros. will, however, remove all trash and loose material, leaving drill sites in a clean and orderly condition.
8. Boyles Bros. certifies it has or will have licenses to do contract work in the state of Arizona. All other licenses, land and water use permits, environmental reports, state reports relating to hole plugging, etc. shall be the responsibility of Essex International. Boyles Bros. shall cooperate with and give technical assistance if requested for your compliance with these regulations.
9. Boyles Bros. shall drill at the location and to the depths specified by the representative of Essex International and shall be held harmless for all liability claims which may arise from normal activity related to this contract, including pollution of ground water or surrounding land from discharge of drill water and wastes. Boyles Bros. agree to accept responsibility for the irresponsible acts of their employees and for the liability which may result from these acts.
10. The prices in this schedule will remain firm for a period of 30 days from the date of the proposal; at which time, if the contract has not been accepted, Boyles Bros. reserves the right to revise any prices or conditions of this offer.
11. Boyles Bros. will invoice at the end of each calendar month for the work done during such period and the terms will be net 30 days. In the event payment is not made within these terms, a late payment charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged. It will be computed from the due date to the date we receive payment.

BOYLES BROS. DRILLING CO.


Essex International, Inc.

January 14, 1975

Page #4

Thank you for asking Boyles Bros. to quote on this work. We will look forward to receiving your instructions.

Yours very truly,


B. L. Austin

BLA:bg

cc: S. L. Mathews

ES-31

Boyles Bld

DATE	DEPTH	AKS	GEL	PLASTER	FOAM	CAL. CHLORIDE	CEMENT	DELSCOSE	#2 QG (IND)	19 SX MUD SOLUBLE	SODA ASH	CAUSTIC	MUD FIBER	FORMALDEHYDE	LIME	STANDBY	CIRCULATION	CEMENTING	WATER	
9/28	S 1725-1800	8					23													
	N																			
			46	5	20	9	1	9	6	23										
11/14	D																			
11/13	D																			
11/13	D																			
11/13	D																			
11/13	D																			
11/18	D																			
	S																			
	N																			
11/19	D																			
	N																			
11/20	D																			
	N																			
11/21	D																			
	S																			
	N																			
11/22	D																			
	S																			
	N																			
11/23	D																			
	N																			
11/25	D																			
	S																			
	N																			
11/26	D																			
	S																			
	N																			
11/29	D																			
	S																			
	N																			
12/2	D																			
	S																			
	N																			
12/3	D																			
	S																			
	N																			
12/4	D																			
	S																			
	N																			

BROKE OUT RODS, FLEED HOSE WITH MUD

MUDED RIG IN - 6 HRS SET UP - 2 HRS STANDBY

RIG UP & HULL WATER FOR PITS 10 HRS "

HULL WATER, MIX MUD, LOWER IN RODS 10 HRS "

CLEANS OUT HOLE TO 1475', PULL RODS 5 HRS "

WASHING DOWN BAD ZONE AT 1535' TO 1560' 5 HRS "

WASHING DOWN TO 1790' CUTS OF FILL 5 HRS "

CLEANS OUT HOLE TO BOTTOM TRIP RODS 5 HRS DRILLING 7 HOURS

DRILLING GOOD - KELLY HOLE BAKES
 Repair Kelly Hole & Trip Rods - CHANGE AT 1500'
 Pull Rods, CHANGE BIT w/ 3 7/8" GAVE AT BOTTOM
 DRILLING 12 HRS
 PULL OUT RODS. CHANGE BIT
 Run Rods in. Wash Down - Repair Kelly Hole.
 MIXING MUD
 Lay Down Drill Pipe - Repairing to Case
 Haul Casings. Tighten collars and casing - 6 Hrs Standby
 Case Hole - Drill Down to Bottom (casing shoe)
 Haul case pipe
 Set Pump and Hook up for casing
 Lower pipe in and mix mud
 Drill out cement and pipe (30' of cement)
 8 Hrs Drilling
 10 " "
 10 " "
 Trip Rods to change bit. Run bit @ 2295'

DRILLING COST AND INFO

ES-31

RIG MOVED IN 11/12/74 - SPENT 5 DAYS
 CLEANING OUT AND REAMING HOLE TO PREVIOUS DEPTH
 OF 1800' - ROTARY STARTED 11/29/74 - DRILLED
 TO 2105' - DUE TO CONDITION OF HOLE, CASING WAS
 PUT IN TO 2105' - CORING COMMENCED ON 11/29/74
 DEPTH AT END OF NOV: 2158 - DRILLING COSTS
 TO 11/30/74 :

18,802.39

DRILLING CONTINUED IN DECEMBER. DEPTH
 AT END OF DRILLING FOR DECEMBER IS 2623 - DUE
 TO BAD GROUND, FOOTAGE OF HOLE WAS NOT UP TO
 STANDARD. APPROX COST TO END OF DECEMBER,
 INCLUDING ALL DRILLING AND EXTRANEUS COST, IS : 12,298.00

TOTAL COST OF HOLE, END OF DEC:

\$ 31,100

DEPTH : 2633

Drill Hole ES-31

12-10-74

TOTAL Depth p.m. 12-10-74 2501'
STRONG pyrite & biotite LAST 400'
INCREASING copper (disseminated) chalcocite
TOTAL Spent to date (estimate) \$ 23,061
" authorized 27,200

Recommend minimum of 1000' more feet
Estimate cost \$20,000

Dec. 30 info. to O'Malley
Jan. 9 Moore

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2385 - 2390

ASSAYS

Cu, Au

Nº 00353

ESSEX INTERNATIONAL

Date _____

ASSAYS

Nº 00353

(Placer claim) Western Wash #1 - 32 (214-239) Doc page

Beginning NW cor of the E/2, SE/4, SW/4 of Sec 4 T.6 R.26E (loc 12/27/73)

NW cor then south 1320' to

the SW cor then East 660' to the SE cor then N 1320' to the NE cor then W 660' to the beginning

Produces mineral moon #10 Doc page 228 - 375 11/19/74 100' from the

East Center end of 1400 from the west end of claim - SE to NW direction.

3928.4 in a N 58° 35' E direction from the S/4 Corner Sec 2 T.6-S

R-26E - more exact direction is N 75° 45' W 1500', S 14° 55' 600', S 75° 45' E 1500' & ...

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2614 - 2619

ASSAYS

Cu

Nº 00352

ESSEX INTERNATIONAL

Date _____

ASSAYS

Nº 00352

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2609 - 2614

ASSAYS

Cu

Nº 00351

ESSEX INTERNATIONAL

Date _____

ASSAYS

MEMO

September 6, 1974

TO: Robert Holt
FROM: Bob Helming

SUBJECT: Status of drill hole ES-31 on the Nail Keg 3 claim.

The included sketch map indicates the location of drill hole ES-31 which was recently drilled to 1800 feet to fulfill assessment requirements on the Nail Keg, Bohemia and other contiguous claim groups.

So far as Essex knows there is an information gap in the area between the San Juan and PD ore bodies and adjacent to the Butte Fault on the north or footwall side. Information from this area could determine what, if any, connection exists between the San Juan and PD ore bodies at depth. From a somewhat more speculative viewpoint the data could aid in defining the shape, position and dimensions of the PD ore body since it is now apparent that PD is doing considerable underground drilling to answer those same questions. All of this data would significantly affect any future decisions concerning Essex land position in the Safford area.

The best way to test the area would have been to drill north of the fault on the San Juan property. This was impossible due to legal problems therefore the alternative was to collar a hole at the present site of ES-31 and attempt to drill through the fault to test the ground beneath the fault. The drill hole should penetrate the fault at approximately 2300 feet assuming a dip of 65 degrees for the fault. We can expect large fracture zones on both sides of the fault plane. The hole was rotary drill 5 3/4 inches diameter to 1800 feet and then filled with drilling mud. No casing was emplaced so the hole may be continued by rotary drill through the fault and then cased.

The biotite-chlorite alteration and mineralization of trace to locally moderate copper oxide in the hanging wall was anticipated based on prior knowledge of nearby outcrops and drill holes. A more detailed log will be prepared when assays are available.

Drill hole ES-31 was stopped on August 28 because the necessary money had been spent for assessment work on the claim group. I recommend Essex continue the hole as soon as a satisfactory drill can be contracted for the following reasons:

- 1) The hole is testing the last area on the claim group where there is insufficient data to form a reasonable geologic conclusion.

- 2) It seems very probable that Essex will maintain its property position for some time and will eventually have to do next years assessment work.
- 3) The longer the hole is left standing the less likely it can be reentered although it appeared to be in good condition.
- 4) The project geologist is presently located in Safford to handle the drilling.

Arguments against continuing the hole now are:

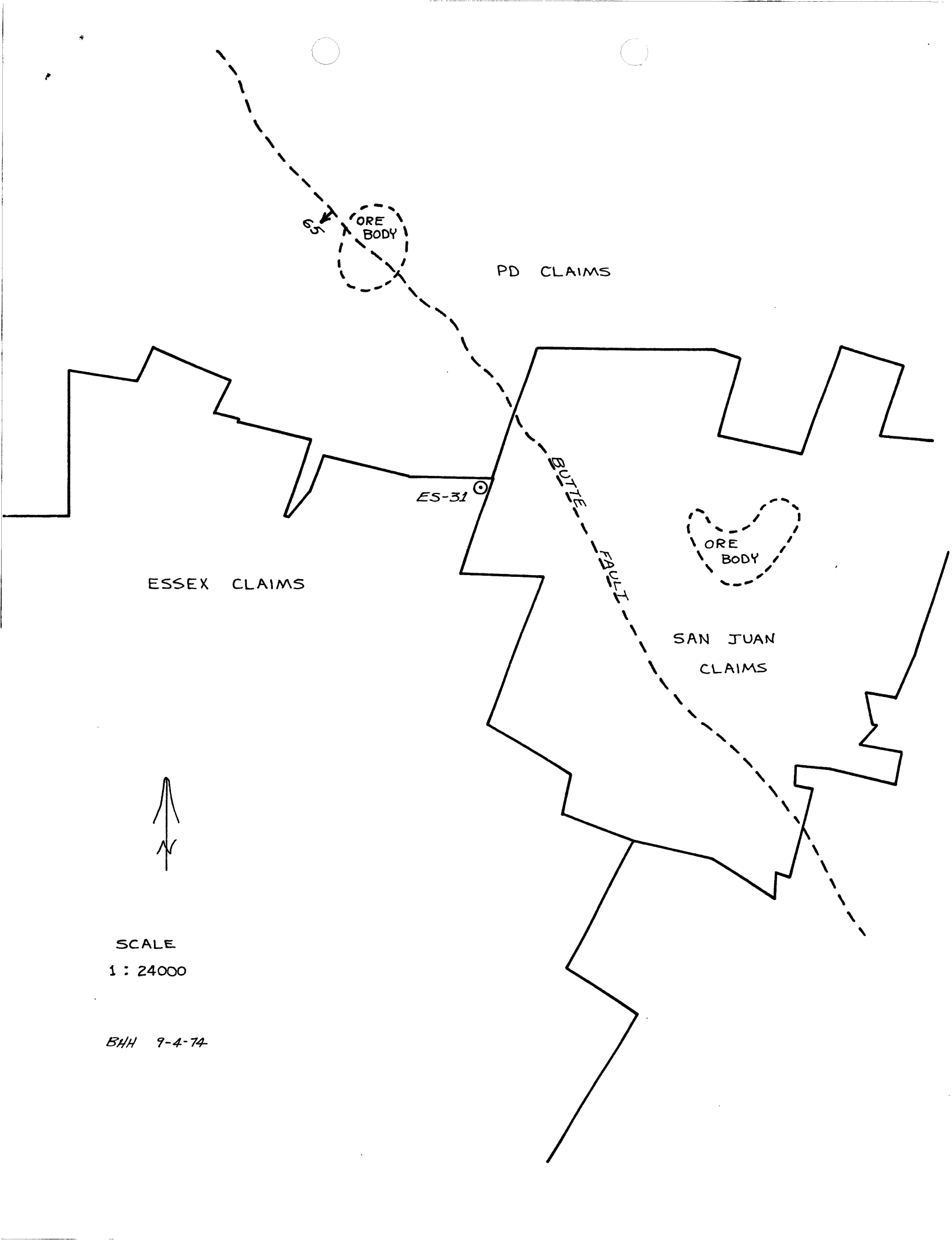
- 1) The claims may be dropped before we have to do next years assessment work.
- 2) No valid target exists and it is an expensive method of data collecting.
- 3) There is the unlikely possibility that PMC could subpoena the drill hole data because the hole is collared only 65 feet from the San Juan property.

Drilling through a major fault at depths exceeding 2000 feet will be a formidable task therefore nothing smaller than a Boyles Bros. DMX drill should be considered. Following are some cost estimates assuming the hole is rotaty drilled to 2600 feet, cased with $3\frac{1}{2}$ inch pipe and cored Nx to 3500 feet.

Rotary drilling to 2600 feet	\$ 9,500
Additives, bits, water truck, etc.	\$ 6,000
Casing	\$11,700
Coring 2600 to 3500 feet	\$15,000
Additives, bits, water truck, etc.	<u>\$ 8,000</u>
Total	\$50,200

The cost of the hole should be compared to the semi-annual property payments for these claim groups of approximately \$65,000. Furthermore, if the hole is drilled now the major portion of the assessment work would be done until July of 1976.

Bob Helming
Project Geologist
Safford, Arizona



65
ORE BODY

PD CLAIMS

ESSEX CLAIMS

ES-31

BOTLE FAULT

ORE BODY

SAN JUAN CLAIMS



SCALE
1 : 24000

BHH 9-4-74

1435 S. 16th AVE.

P. O. BOX 1489

Jacobs Assay Office

Registered Assayers



PHONE 622-0813

Certificate No. 59441

TUCSON, ARIZONA 85702

NOV 26th

1974

Sample Submitted by Mr. Essex International Inc.

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
01701	—	\$		0.130			
2	—			0.135			
3	Trace		SXM	0.130			
4	—			0.135			
5	—			0.115			
6	D.002		NOV 27 1974	0.10			
7	—		RECEIVED	0.125			
8	—			0.140			
9	0.002			0.130			
01710	—			0.115			
11	—			0.120			
12	Trace			0.135			

ES-31
 300000
 100000
 50000
 25000

Unalloyed with pure assays made on above gold assays

* Gold figured \$100.00 per oz. Troy
Charges \$ 42.00

Ben P. Jacob

P. O. BOX 1489

Jacobs Assay Office

Registered Assayers



Certificate No. 59451

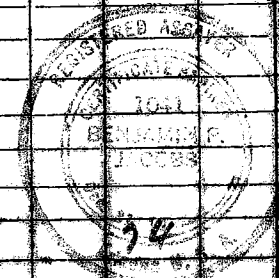
TUCSON, ARIZONA 85702

Dec 10th

1974

Sample Submitted by Mr. Essex International Inc.

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
01713		\$		0.03			
14				0.02			



PROJECT NO. _____
 BUDGET NO. 8557-19
 APPROVES BY _____
 DATE _____ FOR _____
 PAYMENT OF \$ 4.00 ONLY

* Gold figured \$100.00 per oz. Troy

Charges \$ 400

Ben P. Jacob

1435 S. 10th AVE.

P. O. BOX 1889

Jacobs Assay Office

PHONE 622-0813



Registered Assayers

DUPLICATE

Certificate No. 59457

TUCSON, ARIZONA 85702

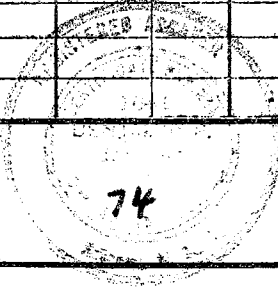
Dec 22 1974

Sample Submitted by Mr. Erroy International, Inc

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
# 00351	Trace	\$		0.045			
352	0.002			0.035			
353	Trace			0.050			
(Duplicate - I.A.T. Fire Assays made on above Gold assay.)							

* Gold Figured \$35.00 per oz. Troy

Charges \$ 30.00



Very respectfully,

Ben P. Jacobs

DIAMOND CORE DRILLING
 70' & Y DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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
 LIMA, PERU
 MEXICO CITY, MEXICO
 (telex: 001774546)

INVOICE DATE: 11-30-74
 ORDER NUMBER: SW-251
 CONTRACT: 6700
 TERMS: 30 days
 LOCATION: No. of Safford, AZ

General Offices and Plant
 CONTRACTORS-ENGINEERS
 MR. PAUL EIMAN
 1700 W. Grand Ave
 Tucson, AZ 85705

Hole No.	From	To	Footage	Rate	Total
RB	1800	2000	200	9.25	1850.00
ES 3 / RB	2000	2105	105	11.25	1181.25
77 hrs	Rug up + unroll down to 1800 ft + mud				
18 hrs	Rug down + haul casing				
20	Set up casing + run in core part with				
2	Bore Standby				
3 1/2	Casing Sols (B)				
97	SX mud 2				
3	SX mud				
3	SX mud (M)				
1	SX mud				
WATER					

22 LOADS .75 - 16.50 -

DIAMOND CORE DRILLING
 MCTAY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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 MR. PAUL EIMON

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

INVOICE DATE: 11-30-74
 ORDER NUMBER: SW-251
 CONTRACT NUMBER: 60-705
 TERMS: 30 days
 LOCATION: No. of Saffer, A2
 Eastern International Drive
 1704 W. Grand Ave
 Tucson Ariz 85705

Hole No.	From	To	Footage	Rate	Total
ES 31	20	gale's Forwardly	35.00	200.00	
	1	5 7/8 Rock Bit	142.00	142.00	
	2105 ft	3 1/2 casing Black	3.80	7,999.00	
	1	Casing Shoe 3 1/2 Flat	55.00		
	1	Mudstone (B)	3.81	3.81	
	1	4 in Plug	1300	13,000	
	30	5x Leonard Portland	2.65	53,00	
		Mudstone to Safford	500.00	500.00	
NX	2105 ft	2158 ft	53	13,900	736,701
		Water bit WT Acetate -390.00 PER Mo.	13,00	234,00	
		Water Tub Millage 484 ml.	30	145,20	

MIXING, HANDLING & TRANSPORTATION 15%
 1595.38 239,31
 18,902.34

COST ESTIMATION

COST TO 11/30/74 17,827

COST TO 11/7/74 ;
(306' FT) DRILLING 4,284
MUD COST, ECT. 950

TOTAL TO DATE : 23,061

Depth 12-7-74 2411

Estimated cost to drill to
3000' — \$15,000.00

2500
1800

700

700 $\sqrt{23000}$ 32.
0100

200

17.70 x 1000

17,700

1540

600

\$9740.00

1000

used etc.

10740

2000
1800
200

10000
10000
10000

17.20 x 1000

17,200

BOYLES BROS. DRILLING COMP.
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-4-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2320 CAL-SEAL _____
DEPTH, START OF SHIFT 2295 LUMNITE _____
DRILLED 25 PORTLAND _____
CORE RECOVERED 25 ADDITIVES _____
TYPE OF ROCK TMF WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) trip rods out change bit + core barrel, trip rods in + start drilling, new bit 2295

DRILLER John Bergstedt HELPER Tom
MACHINE NO. _____ FOREMAN _____
7

BC LES BROS. DRILLING
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-5-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 37

RODS, END OF SHIFT _____ MUD Zymud 2
STICKUP, END OF SHIFT _____ TYPE 1 Soda Ash
DEPTH, END OF SHIFT 2345 CAL-SEAL 1 Duck mud Seal
DEPTH, START OF SHIFT 2320 LUMNITE 1 Rod Lube
DRILLED 25 PORTLAND _____
CORE RECOVERED 25 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 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) _____

DRILLER W. Hahn HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-5-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2365
DEPTH, START OF SHIFT 2345
DRILLED 20
CORE RECOVERED _____
TYPE OF ROCK HARD
NUMBER OF RUNS 2

MUD #2 - 1 SACK
rod tube - 5 gyl
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) trip rods out to
run different type of bit, new bit
2365

DRILLER John Beckett HELPER Tom
MACHINE NO. 7 FOREMAN _____

BOILES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-6-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2393 LUMNITE _____
DRILLED 2365 PORTLAND _____
CORE RECOVERED 28 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) lower rods in
& start drilling

DRILLER AL HELPER DAVE
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-6-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2411 CAL-SEAL _____
DEPTH, START OF SHIFT 2393 LUMNITE _____
DRILLED 18 PORTLAND _____
CORE RECOVERED 18 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 7 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 3
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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 John Borgstret HELPER Tom
MACHINE NO. 7 FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-9-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 2 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Drical
DEPTH, END OF SHIFT 2439 CAL-SEAL 1 Soda Ash
DEPTH, START OF SHIFT 2411 LUMNITE _____
DRILLED 28 PORTLAND _____
CORE RECOVERED 28 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Helw HELPER Dave

MACHINE NO. 7 FOREMAN _____

BC LES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6 704 LOC. SAFFORD DATE 12-9-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2469 CAL-SEAL _____
DEPTH, START OF SHIFT 2439 LUMNITE _____
DRILLED 30 PORTLAND _____
CORE RECOVERED 30 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) drain pumps for the night, put wire line back on drive wheels.

DRILLER John Bergstedt HELPER Sterling
MACHINE NO. _____ FOREMAN _____
7

BYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-10-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2487
DEPTH, START OF SHIFT 2469
DRILLED 18
CORE RECOVERED 18
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE 2 mud 2 fuel 1000
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 load

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

TIME CHARGES

DRILLING 10 _____ 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) trip rods out

DRILLER Del Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

B'YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6 704 LOC. SAFFORD DATE 12-10-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2503 CAL-SEAL _____
DEPTH, START OF SHIFT 2437 LUMNITE _____
DRILLED 16 PORTLAND _____
CORE RECOVERED 16 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 8 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) trip rods in & start drilling, new bit at 2437 lost circulation at 2503

DRILLER John Bergstadt HELPER Ross Romero
MACHINE NO. _____ FOREMAN _____
7

B. YLES BROS. DRILLING COMPANY
SHIFT REPORT

OB 6-704 LOC. Safford DATE 12-11-74
SHIFT DAY 2 SWING _____ NITE _____ HOLE NO. 8531

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2520
DEPTH, START OF SHIFT 2503
DRILLED 18
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 12' mud 2
TYPE 4 Disk Seal
CAL-SEAL 4 Disk mud Sec.
LUMNITE 1 Soda Ash
PORTLAND _____
ADDITIVES _____
WATER Silvada's

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

TIME CHARGES

DRILLING 5 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ Per STAND-BY OR SURVEY 5
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) _____

DRILLER Al Hebe HELPER Alave
MACHINE NO. _____ FOREMAN _____
7

BYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-11-71
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 6 mud 2
STICKUP, END OF SHIFT _____ TYPE 4 Bulk Seal
DEPTH, END OF SHIFT 2523 CAL-SEAL 2 Dick's Mud Seal
DEPTH, START OF SHIFT 2520 LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED 3 ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS 1

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

TIME CHARGES

DRILLING 1 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ Circ
SET-UP, TEAR DOWN _____ STAND-BY OR SURVEY 9
MIXING MUD _____ 10 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) trip rods out to cement hole

DRILLER John Bergstead HELPER Louis
MACHINE NO. 7 FOREMAN _____

B'YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-12-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD #2 - 5 - SACKS
STICKUP, END OF SHIFT _____ ~~TYPE~~ PRISCOSE - 1 - SACK
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 7 _____
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) go in & check
cement, cement went out formation,
(haul water) fill the pits

DRILLER John Borgstad HELPER Louis
MACHINE NO. 7 FOREMAN _____

B YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-12-74
SHIFT DAY SWING NITE HOLE NO. 5531

RODS, END OF SHIFT _____ MUD 4 mud 2
STICKUP, END OF SHIFT _____ TYPE 1
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT _____ LUMNITE _____
DRILLED _____ PORTLAND 135 x portland
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) Deep in wash
pipe cement water of.

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

B YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-~~13~~-74¹³
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD box mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Buil Seal
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2523 LUMNITE 1 mulls lime
DRILLED _____ PORTLAND 1451 portland
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) Start up drilling
could not get to bottom
could not hole
trip in & waiting as cement wash
down

DRILLER Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

BC BROS. DRILLING COMPA'Y

SHIFT REPORT

JOB G-704 LOC. Safford DATE 11-22-74

SHIFT DAY _____ SWING _____ NITE HOLE NO. ES-31

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 _____	7	CEMENTING _____
REAMING _____		EQUIP. REPAIR _____
CASING _____	8	STAND-BY OR SURVEY <u>8</u>
SET-UP, TEAR DOWN _____	8	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) lay down drill pipe, prepare to case

DRILLER Tom Bergsteadt HELPER Sterling

MACHINE NO. _____ FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-23-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2105 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 4 _____
CASING _____ STAND-BY OR SURVEY 6 _____
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) Haul casing
Washed Collars on casing part near
Cable on Kelly line

DRILLER Al Helm John HELPER Russ Frank

MACHINE NO. _____ FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-25-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE 1 casing shoe
DEPTH, END OF SHIFT _____ CAL-SEAL 1 mud line
DEPTH, START OF SHIFT 2105 LUMNITE _____
DRILLED _____ PORTLAND 20 portland
CORE RECOVERED _____ ADDITIVES 1 4 in plug
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

FEET CASED _____ FROM 0 TO 2105 SIZE 3 1/2 ID
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ CEMENTING 2 hrs
REAMING _____ EQUIP. REPAIR _____
CASING 15 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) Case hole drill
down to 9 ft casing on bottom
Had alot of trouble getting on bottom

DRILLER Ol Keki Tom HELPER Stevy & Rouis
MACHINE NO. _____ FOREMAN _____
7

BOILES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-26-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 6-mud 2
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2105 LUMNITE 1 caustic Soda
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 1 load
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 4
REAMING _____ EQUIP. REPAIR 4
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) Haul Core pipe
From other locations to set up casing

DRILLER Al Herb Tom HELPER Louis
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-27-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES-31

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

TIME CHARGES

DRILLING _____ Hourly
CEMENTING 4
REAMING _____ EQUIP. REPAIR 4
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) Out of Casing
Set Pump & Hook up for Casing

DRILLER D. Hehr HELPER Louis
MACHINE NO. _____ FOREMAN _____
7

BYLES BROS. DRILLING COMP. NY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. E-S-31

RODS, END OF SHIFT _____ MUD 6 SA 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 3 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ Hourly
CEMENTING 8
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) Lower pipe in
2000 ft & mix mud.

DRILLER Tom John HELPER Sterling
MACHINE NO. _____ FOREMAN _____

B YLES BROS. DRILLING COMP. NY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-29-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 3 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Driscoll
DEPTH, END OF SHIFT 2118 CAL-SEAL _____
DEPTH, START OF SHIFT 2105 LUMNITE _____
DRILLED 13 PORTLAND _____
CORE RECOVERED 13 ADDITIVES _____
TYPE OF ROCK _____ WATER 3 loads
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 4 _____ CEMENTING 4 _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY 8 _____
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) Drillout cement
+ plug 30 ft cement to drilled out

DRILLER Al Hahn John HELPER Louis

MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-709 LOC. Safford DATE 1-29-79
SHIFT DAY _____ SWING C NITE _____ HOLE NO. E5-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2138 CAL-SEAL _____
DEPTH, START OF SHIFT 2118 LUMNITE _____
DRILLED 20 PORTLAND _____
CORE RECOVERED 20 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 9 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING 9 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) _____

DRILLER Tom Bergstadt HELPER Stirling
MACHINE NO. 7 FOREMAN _____

BC LES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC Safford DATE 12-2-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 4 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Driscoll
DEPTH, END OF SHIFT 2160 CAL-SEAL _____
DEPTH, START OF SHIFT 2138 LUMNITE 1 Caustic
DRILLED 22 PORTLAND _____
CORE RECOVERED 27 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 8 _____ 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) _____

DRILLER al Hehi _____ HELPER David _____
MACHINE NO. 7 _____ FOREMAN _____

BC LES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-2-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2200 _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2160 _____ LUMNITE _____
DRILLED 40 _____ PORTLAND _____
CORE RECOVERED 40 _____ ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 4 _____

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

TIME CHARGES

DRILLING 8 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING 8 _____ 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) _____

DRILLER Tom Borgstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____

BC . LES BROS. DRILLING COMPA. Y

SHIFT REPORT

JOB 6-204 LOC. Safford DATE 12-3-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 3 mud 2
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2230 CAL-SEAL _____
DEPTH, START OF SHIFT 2200 LUMNITE _____
DRILLED _____ 30 PORTLAND _____
CORE RECOVERED _____ 30 ADDITIVES _____
TYPE OF ROCK _____ WATER 1-load
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Weber HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-3-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 1 caustic soda
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2209 CAL-SEAL _____
DEPTH, START OF SHIFT 2230 LUMNITE _____
DRILLED 39 PORTLAND _____
CORE RECOVERED 39 ADDITIVES _____
TYPE OF ROCK _____ WATER 1 Road
NUMBER OF RUNS 4

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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 John Bergstedt HELPER Tam
MACHINE NO. _____ FOREMAN _____
7

BC LES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-4-74
SHIFT DAY SWING NITE HOLE NO. 2531

RODS, END OF SHIFT _____ MUD 3 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Driscoll
DEPTH, END OF SHIFT 2295 CAL-SEAL 1 Dick's mud seal
DEPTH, START OF SHIFT 2269 LUMNITE _____
DRILLED 26 PORTLAND _____
CORE RECOVERED 26 ADDITIVES _____
TYPE OF ROCK HARD WATER 1 lead
NUMBER OF RUNS 3

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) repack swirl

DRILLER Al Hehr HELPER Dave
MACHINE NO. 7 FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-15-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____ MUD #2 - 2 SACKS
STICKUP, END OF SHIFT _____ MUD FIBER - 3 SACKS
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 10
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) lower in rods & haul water & mix mud

DRILLER John Bengtson HELPER Louis
MACHINE NO. _____ FOREMAN _____
7

BO' ES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-15-74

SHIFT DAY _____ SWING NITE _____ HOLE NO. _____

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 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 8
SET-UP, TEAR DOWN _____ 8 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) clean out hole

to 1475' full rods

DRILLER Tom Borgstadt HELPER Sterling

MACHINE NO. _____ FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-18-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD 105X mud 2
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL 3 5 gal Can found
DEPTH, START OF SHIFT _____ LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 1 load
NUMBER OF RUNS _____

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

TIME CHARGES
Hourly 8
~~DRILLING~~ _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

New Bit **BITS AND SHELLS** 5 7/8
BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF _____
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Washing down
Bad zone at 1535 to 1560

DRILLER Al Heh HELPER Louis Romero
MACHINE NO. _____ FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-19-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD #2 1 SACK
STICKUP, END OF SHIFT _____ FOR MILD STEEL - 5 GAL.
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

HOURLY
DRILLING 8 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) washing down to
1600 lot of fill.

DRILLER John Borgstad HELPER Frank Byron
MACHINE NO. _____ SS# 231-66-3010
7

BOES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-18-74

SHIFT DAY _____ SWING _____ NITE ✓ HOLE NO. E9-31

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 mud # 2
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

Hourly 8
~~DRILLING~~ _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ 8 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) wash down to 1790' lots of fill

DRILLER Tom Bergstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-19-74
~~ES 31~~

SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____	DISPERSE-1 SACK MUD _____
STICKUP, END OF SHIFT _____	TYPE _____
DEPTH, END OF SHIFT <u>1835</u>	CAL-SEAL _____
DEPTH, START OF SHIFT <u>1800</u>	LUMNITE _____
DRILLED <u>35</u>	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 50 HOURLY CEMENTING 70

REAMING _____ EQUIP. REPAIR _____

CASING _____ STAND-BY OR SURVEY _____

SET-UP, TEAR DOWN _____ WATER DELAY _____

MIXING MUD _____ 12 WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE 5/8" R.B. ^{Time 3:30 P.M. 11-19-74} OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Clean out hole to bottom, trip rods out & add collars trip rods in & start drilling

DRILLER John Borgstad 12hrs HELPER Louis Eric Frank 12hrs

MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-19-74
SHIFT DAY _____ SWING _____ NITE HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 1945 CAL-SEAL _____
DEPTH, START OF SHIFT 1835 LUMNITE _____
DRILLED 110 PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 1 load
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 12 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) belly hose broke

DRILLER Tom Borgstadt 12 HELPER ^{FRANK} ~~_____~~ 9 Sterling 8
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB E-704 LOC. SAFFORD DATE 11-20-74
SHIFT DAY L SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 1985 CAL-SEAL _____
DEPTH, START OF SHIFT 1945 LUMNITE _____
DRILLED 40 PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 12 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 12 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) repair Kelly hose +
trip rods out. got rod hung hole
driving at 1500 to 1574

DRILLER John Bergstedt 12 hrs HELPER Louis Dhes Frank 4 hrs
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANIES
SHIFT REPORT

JOB 6-704 LOC. Sufford DATE 11-20-74
SHIFT DAY _____ SWING _____ NITE U HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2040 CAL-SEAL _____
DEPTH, START OF SHIFT 1985 LUMNITE _____
DRILLED 55 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 12 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 12 WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE 5 7/8 R.B. ^{at 11:00 P.M.} OVERSIZE _____ ON 1985 OFF _____
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) full rock change
bits, run in with 5 7/8 R.B.
About 30' of save in bottom of hole

DRILLER Tom Borgstadt HELPER Franky, Sterling
MACHINE NO. _____ FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-21-74
SHIFT DAY SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 2 mud 2.
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2045 CAL-SEAL 1 5X Caustic Soda
DEPTH, START OF SHIFT 2040 LUMNITE _____
DRILLED 5 PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 1 load
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 4 _____ 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) Condition mud
mud to Heavy

DRILLER Al Hela HELPER Hours 4
MACHINE NO. _____ FOREMAN _____

BC BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-709 LOC. Safford DATE 11-21-74
SHIFT DAY _____ SWING _____ NITE HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2080 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 6 CEMENTING _____
REAMING _____ EQUIP. REPAIR 2
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN 9 WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE ^{new bit} 5 7/8 RB OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Pull out rest of the
way Run in with new bit plug
bit was same unalone pull
back a little ways repair lose
bit same unplugged

DRILLER Tom Borgstede HELPER Sterling

MACHINE NO. 7 FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-21-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2030 CAL-SEAL _____
DEPTH, START OF SHIFT 2045 LUMNITE _____
DRILLED 35 PORTLAND Driscoll or MC
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 12 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) [Handwritten scribbles]

DRILLER John Borgstad 12 hrs HELPER Louis 4 hrs Frank 8 hrs

MACHINE NO. _____ FOREMAN _____

BC LES BROS. DRILLING COMPA.

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2105 CAL-SEAL _____
DEPTH, START OF SHIFT 2080 LUMNITE _____
DRILLED 25 PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 7 CEMENTING _____
REAMING _____ EQUIP. REPAIR 1
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) run rod in
wash down 200 ft fill repair
Kelley hose.

DRILLER Al Hehr 8 HELPER Rouis 8
MACHINE NO. _____ FOREMAN _____
7

BC BROS. DRILLING COMPA'Y
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY SWING NITE HOLE NO. _____

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 4 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 4 _____
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) Lay down pipe
getting stuck pipe out cont drill
with rock Bit Hole Caving Bad
Broke chain on rig & 4 part line

DRILLER John Bergalot HELPER Frank Byram

MACHINE NO. 7 FOREMAN _____

BC LES BROS. DRILLING COMPA.
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-22-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2105 _____ 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 _____ 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) _____

DRILLER John Bergstedt HELPER Frank Byram
MACHINE NO. _____ FOREMAN _____
7

P. YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB L-704 LOC. SAFFORD DATE 12-18-74
SHIFT DAY _____ SWING ✓ NITE _____ HOLE NO. E5-31

RODS, END OF SHIFT _____ MUD Soda ASA - 1 SACK
STICKUP, END OF SHIFT _____ ~~TYPE~~
DEPTH, END OF SHIFT 2524 CAL-SEAL _____
DEPTH, START OF SHIFT 2523 LUMNITE _____
DRILLED 1 PORTLAND _____
CORE RECOVERED 1 ADDITIVES _____
TYPE OF ROCK _____ WATER 1 LOAD
NUMBER OF RUNS 1

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

TIME CHARGES

DRILLING 7 CEMENTING _____
REAMING _____ Circulation
CASING _____ EQUIP. REPAIR 1
SET-UP, TEAR DOWN _____ STAND-BY OR SURVEY _____
MIXING MUD _____ WATER 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) trips rods out,
drill barrel wedged in core barrel with
lost circulation material.

DRILLER John Bergstedt HELPER Louis
MACHINE NO. 7 FOREMAN _____

WYLES BROS. DRILLING COM. NY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-19-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES31

RODS, END OF SHIFT _____ MUD 15 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Diesel
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT _____ LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 3 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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 28 28
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) run plug down
again + wash to bottom
got 16090 Cu

DRILLER W Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

DYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SUFFERD DATE 12-19-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

REF. STICK UP
RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2553
DEPTH, START OF SHIFT 2524
DRILLED 29
CORE RECOVERED 29
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD #2 - 10 SACKS
SOFTENED - 3 SACKS
TYPE _____
DISCS (incl. soft) - 1 SACK
CAT-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER - 4 LOADS

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 2
EQUIP. REPAIR _____
STAND-BY OR SURVEY _____
WATER DELAY _____
WASHING OR CLEANING 10

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) Finish washing on Bottom

DRILLER John Bergstad HELPER Louis
MACHINE NO. 7 FOREMAN _____

DYLES BROS. DRILLING COM. INC.
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-20-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. 88-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 0567
DEPTH, START OF SHIFT 2553
DRILLED 14
CORE RECOVERED 14
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD 3 Mud 2
TYPE _____
CAL-SEAL 1 Soda Ash
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 2 loads

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

TIME CHARGES

DRILLING 10 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) Hard Water to fill up bits Drilling slower than #

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____

DYLES BROS. DRILLING COM NY
SHIFT REPORT

JOB 6-704 LOC. SAFFERID DATE 12-20-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE 158 Lube - 5 GALLONS
DEPTH, END OF SHIFT 2592 CAL-SEAL _____
DEPTH, START OF SHIFT 2567 LUMNITE _____
DRILLED 25 PORTLAND _____
CORE RECOVERED 25 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) finish tripping rods
cut change bit, trip rods in new bit
2567

DRILLER John Borgstedt HELPER Louis
MACHINE NO. _____ FOREMAN _____
7

DYLES BROS. DRILLING COM INY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-23-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE 2 Rod Tube
DEPTH, END OF SHIFT 2620 CAL-SEAL 1 CMC
DEPTH, START OF SHIFT 2592 LUMNITE _____
DRILLED 28 PORTLAND _____
CORE RECOVERED 28 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 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) _____

DRILLER Al Hehr HELPER Dave
MACHINE NO. 7 FOREMAN _____

LYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SARFORD DATE 12-23-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-51

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2623 CAL-SEAL _____
DEPTH, START OF SHIFT 2620 LUMNITE _____
DRILLED 3 PORTLAND _____
CORE RECOVERED 3 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 1

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

TIME CHARGES

DRILLING 8 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 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) trip rods out & change bit, lower rods in 200 feet new bit at 2623, drilled 3 feet in 2 hours.

DRILLER John Beget HELPER Lewis

MACHINE NO. _____ FOREMAN _____
7

DYLES BROS. DRILLING COM. INY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-2-75
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2638
DEPTH, START OF SHIFT 2623
DRILLED 15
CORE RECOVERED 15
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE 1 Rod Lube
CAL-SEAL Sparseon
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1. barrel

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Hehr HELPER Dave
MACHINE NO. 7 FOREMAN _____

DYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SUFFERD DATE 1-2-75
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD 1 Rod Rule
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2665 CAL-SEAL _____
DEPTH, START OF SHIFT 2638 LUMNITE _____
DRILLED 27 PORTLAND _____
CORE RECOVERED 27 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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 John Burgette HELPER Rick Merrill
MACHINE NO. 7 FOREMAN _____

DYLES BROS. DRILLING COM NY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-3-75
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. 8531

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2685
DEPTH, START OF SHIFT 2665
DRILLED 20
CORE RECOVERED 20
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE 1 Rod Lube
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 6 CEMENTING _____
REAMING _____ EQUIP. REPAIR 3
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN 9 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) Change oil
on all ~~bits~~ ~~tools~~

DRILLER Al Hehn HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-12-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. _____

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 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 2
SET-UP, TEAR DOWN 6 WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF 20
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) None
in

DRILLER Al Helu HELPER John
MACHINE NO. _____ FOREMAN _____
7

BOYD BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-13-74
SHIFT DAY L SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____ MUD ^{195X} mud 2. 100.
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 4 loads
NUMBER OF RUNS _____

FEET CASSED _____ 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 10
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) sig up + haul
water to fill pits

DRILLER al Wehr HELPER John + Tom
MACHINE NO. 7 FOREMAN _____

BO' ES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-14-74
SHIFT DAY SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____ MUD #2 20 SA
STICKUP, END OF SHIFT _____ ~~OPPOSITE~~ - 1 SACK
DEPTH, END OF SHIFT _____ ~~SAFFORD~~ - 1 SACK
DEPTH, START OF SHIFT _____ ~~CAUSTIC~~ - 1 SACK
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 10
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) haul water & mix mud, lower in pipe.

DRILLER John Al & Tom HELPER Louis Romero
MACHINE NO. _____ FOREMAN _____

SPEED MEMO

To *Dick Kelly*

At *11/6/74*

Subject *RFA Saturated Proj.*

Enclosed are the following

- 1) P.D. Area 32889.93*
- 2) Kennebec Area 13,600.⁰⁰*
- 3) Snd Twn Area 23,400.⁰⁰*

Please submit for corporate approval. Please note the attached payment schedule which will be

PLEASE REPLY TO  Signed

At

good for comparison with your info. If you have any questions please let me know.

Date

Signed *Grover Heinrichs*

ACT 002

SENDER'S COPY

FF AT THE DESK OF:

E. Grover Heinrichs

Hole ES-31

Stopped

1/6/74

Depth 2745'

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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
 LIMA, PERU
 CABLE: BOYLESBROS
 CABLE: BOYLESBROS
 MEXICO CITY, MEXICO
 (MEX) 001774546

INVOICE DATE: 11-30-74
 ORDER NUMBER: 71
 INVOICE NUMBER: 6744
 CONTRACT: 30 days
 TERMS: No. of Scaffolds
 LOCATION: No. of Scaffolds

East International Inc.
 1704 W. Grand Ave.
 Team Aug 85-105
 Web Cost

Hole No.	From	To	Footage	Rate	Total
77	1800	2000	200	9.25	1850.00
ES 3 /	2000	2105	105	11.25	1181.25
77 h/a	leg up + wash down to 1800 ft. + mud			35.00	2695.00
18 h/a	leg down + haul casing			35.00	690.00
30	Set up casing + mud in core pipe + hole			35.00	700.00
2	beam Standby			35.00	70.00
39	Caustic Soda				
97	SX mud 2	22	Load water	.75	16.50
3	SX mud Drilled				
3	SX mud filter				
2	SX Dispenser				

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 IRONWOOD, MICHIGAN
 SANTIAGO, CHILE
 Cable: BOYLESBROS
 LIMA, PERU
 Cable: BOYLESBRO
 MEXICO CITY, MEXICO
 Telex: 00174546

INVOICE DATE: 11-30-74
 ORDER NUMBER: 6-704
 INVOICE NUMBER: 30 days
 CONTRACT: No of 3 offer.
 TERMS:
 LOCATION:

Every International Inc
 1704 W. Grand Ave
 Tucson Ariz 85705

Hole No.	From	To	Footage	Rate	Total
ES 31	20	Gale's Forward byde			
	1	5 7 Rock Bit		142.	142.00
	2105 ft	3 1/2 Clearing Black.			55.00
	1	Casing Shoe			
	1	Muscle Limb			
	1	4 in Plug		1300	13.00
	20	5x Cement Portland			500.00
	770	Abilgation to Safford			
	2105 ft	2158 ft.	53	1390	736.70
	Water take w/ T rental			390.00.	234.00
	Water Tub Mileage	484 mi.		30 Mile	145.20

WCB
 11/30/74

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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
 SANTIAGO, CHILE
 CABLE: BOYLESBROS
 LIMA, PERU
 CABLE: BOYLESBROS
 MEXICO CITY, MEXICO
 (TELEX: 001774546)

INVOICE DATE: 12-24-74

ORDER NUMBER:

INVOICE NUMBER:

CONTRACT:

TERMS:

LOCATION:

Hole No.

ES = 31

6-704
 30 days
 No of Safford

East International Inc.
 1704 W. 21st Ave
 Tucson Ariz 85705

Web
 11/12

Hole No.	From	Footage	Rate	Total
ES = 31	1 SX	390'	8.08	3168
	1 SX	Drum		
	1 SX	Wallnut med.	11.12	11.12
	27 SX	Portland Cement	2.65	71.55
		95 hrs cement drilling time + Standby	35.00	3325.00
		24 days water the Rental 390 me	13.00 da	312.00
		744 miles	30 miles	223.20
		31 loads water at	75	23.25

DIAMOND CORE DRILLING
 ROTARY DRILLING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



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
 SALT LAKE CITY, UTAH
 CABLE: BOYLESBROS
 LIMA, PERU
 CABLE: BOYLESBROS
 MEXICO CITY, MEXICO
 TELEX: 001774546

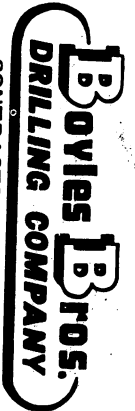
INVOICE DATE: 12-24-74
 ORDER NUMBER: 6-704
 INVOICE NUMBER: 30 days
 CONTRACT: Tucson Aug 85705
 TERMS: 7/10 2/10 net 30
 LOCATION: Mt of Safford

Easy International Inc.
 1704 W. Grant Ave.
 Tucson Aug 85705

W B B
 12/24/74

Hole No.	From	To	Footage	Rate	Total
ES-31	2158	2500	362	13.90	5033.80
	2500	2623	123	15.740	1894.20
	935X	mud 2		3.92	362.70
	65X	Drill		99.40	596.40
	35X	Carate's Soda		18.15	54.45
	75X	Soda Ash		14.50	101.50
	115X	Brick Seal		15.40	169.40
	125X	Dicks mud Seal		10.55	126.60
	35X	Barite			
	15X	mud filter			
	15X	Reboaters			

DIAMOND CORE DRILLING
 STARY CRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



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: BOYLESBROS
 MEXICO CITY, MEXICO
 telex: 001774546

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SV-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Mr. Paul Simon
 Esser International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
BS-31	HX	2105	53	13.90	736.70
Mobilization to Safford					500.00
TOTAL BILLING					18,802.34

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ESTIMATING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



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

INVOICE DATE: November 30, 1974
 ORDER NUMBER:
 INVOICE NUMBER: SW-251
 CONTRACT: 6-704
 TERMS: Net 30 Days
 LOCATION: North of Safford, Arizona

Mr. Paul Miron
 Kaiser International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 IRONWOOD, MICHIGAN
 SANTIAGO, CHILE
 CABLE: BOYLESBROS
 LIMA, PERU
 CABLE: BOYLESBROS
 MEXICO CITY, MEXICO
 Telex: 00174546

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Formaldehyde		20 Gal.	35.00	700.00
	Miracle Lime (Baroid)		1 Sk.	3.81	3.81
	Portland Cement		20 Skrs.	2.65	53.00
Mixing, handling & Transportation			15 %	1,595.38	239.31
	Water		22 Loads	.75	16.50
	Rock Bit - 5 7/8		1	142.00	142.00
	3/4 Casings Black		2105 Ft.	3.80	7,999.00
	3/4 Casings Shoe Float		1	55.00	55.00
	4" Plug		1	13.00	13.00
Water Truck Rental - 390.00 Per Mo.			18 Days	13.00	234.00
Water Truck Mileage			484 Mi.	.30	145.20

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 CUTTARY CHILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



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

Mr. Paul Eimon

Essex International, Inc.

1704 W. Grant Avenue

Tucson, Arizona 85705

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: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Hole No.	From	To	Footage	Rate	Total
RS-31	RB	1800	200	9.25	1,850.00
	RB	2000	105	11.25	1,181.25
			77 Hrs.	35.00	2,695.00
			18 Hrs.	35.00	630.00
			20 Hrs.	35.00	700.00
			2 Hrs.	35.00	70.00
			3 Sk.	22.49	67.47
			97 Sk.	3.90	378.30
			3 Sk.	99.40	298.20
			3 Sk.	15.40	46.20
			2 Sk.	21.70	48.40

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DYLES BROS. DRILLING COM INY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 1-3-75
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-71

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2705 CAL-SEAL _____
DEPTH, START OF SHIFT 2685 LUMNITE _____
DRILLED 20 PORTLAND _____
CORE RECOVERED 20 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) alot of mud rings on every run, had trouble with mud rings.

DRILLER John Borgstaedt HELPER Rick Merrill
MACHINE NO. _____ FOREMAN _____
7

DYLES BROS. DRILLING COM NY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-4-78
SHIFT DAY SWING _____ NITE _____ HOLE NO. E5-31

RODS, END OF SHIFT _____ MUD 1 Dispersion
STICKUP, END OF SHIFT _____ TYPE 1 Rod Tube
DEPTH, END OF SHIFT 2715 CAL-SEAL _____
DEPTH, START OF SHIFT 2705 LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 4 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR 2 _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 6 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) _____

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

DYLES BROS. DRILLING COM NY
SHIFT REPORT

JOB 6-704 LOC. SARFORD DATE 1-4-75
SHIFT DAY _____ SWING V NITE _____ HOLE NO. LS 31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2735 CAL-SEAL _____
DEPTH, START OF SHIFT 2715 LUMNITE _____
DRILLED 20 PORTLAND _____
CORE RECOVERED 20 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 6 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 6 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) trip gets out to
change bit new bit at 2735.

DRILLER John Bergstedt HELPER Rich Merrill
MACHINE NO. 7 FOREMAN _____

B YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-16-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 24

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2523 LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) start up swing
shell didn't show up got D₂ instead
wash down to 110 ft from bottom
core 30 ft + trip rods WFB

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

B YLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6 704 LOC. SUFFERIN DATE 12-18-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2523
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD #2 - 18 SACKS
DICKS m u s e n s 2 SACKS
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 4 LOADS

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

TIME CHARGES

DRILLING _____ CEMENTING 14
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 14 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) drill out cement
down to 2ft. from bottom, lost
circulation.

DRILLER John Bergstedt HELPER Louis
MACHINE NO. 7 FOREMAN _____

BYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-17-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

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 _____ CEMENTING ⓧ _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 4 _____
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) Circ problems
Haul Water

DRILLER Al Lehr HELPER Dave
MACHINE NO. 7 FOREMAN _____

EYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-18-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ 5' MUD 3-BARITE
STICKUP, END OF SHIFT _____ TYPE 1-SALT GEL [Zeugel]
DEPTH, END OF SHIFT _____ CAL-SEAL 1-MUD Fiber
DEPTH, START OF SHIFT _____ LUMNITE 1-Dicks Mudseal
DRILLED _____ PORTLAND 2-Kwikseal Med
CORE RECOVERED _____ ADDITIVES 1-Asbestos
TYPE OF ROCK _____ WATER 1-lime
NUMBER OF RUNS _____ 1-Wall-Not [Med]

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) Dump plug down
Wash 200 ft out to Bottom

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES

Boyles Bros. DRILLING COMPANY

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



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

November 11, 1974

SXM
NOV 12 1974
RECEIVED

Essex International, Inc.
 1704 West Grant Avenue
 Tucson, Arizona 85705

Attention: Mr. Paul Eimon

Gentlemen:

We are pleased to submit the following quotation for rotary and core drilling on your project located near Safford, Arizona. The following price schedule will apply for rotary and core drilling with our Failing DMX rig.

1. Mobilization and Demobilization - \$500.00 lump sum each rig.
2. Drilling rates - Vertical Holes:

2.1 Rates -	Hammer Or Rockbit	<u>NX</u>	<u>BX</u>
0 to 500 feet	\$ 5.00		
500 to 1,000 "	6.10		
1,000 to 1,500 "	7.40		
1,500 to 2,000 "	9.25	\$12.65	\$12.65
2,000 to 2,500 "	11.25	13.90	13.90
2,500 to 3,000 "		15.40	15.40
3,000 to 3,500 "		17.20	17.20
3,500 to 4,000 "		19.60	19.60

2.2 While rotary drilling, if the rock should become so hard or other ground conditions be encountered such that the penetration rate falls below 50 feet per eight-hour shift over a period of six consecutive drilling shifts, Boyles will have the right to charge at the rate of \$42.50 per rig hour plus the cost of bits consumed or case the hole for core drilling.

2.3 Reaming to be charged at \$7.50 per foot.

Essex International, Inc.

November 11, 1974

Page #2

3. The following items to be charged at the rate of \$35.00 per hour:
 - 3.1 Cementing and regaining lost circulation.
 - 3.2 Cleaning out and conditioning existing holes; hourly rate to apply until normal drilling operations are commenced.
 - 3.3 Making up core-drilling string when changing over from rotary to core drilling.
 - 3.4 Surveying the hole plus \$125.00 per week for the survey instrument while in use.
 - 3.5 Installing or retrieving casing.
 - 3.6 Set-up, moving between holes, and tearing down.
 - 3.7 Standby time at your request.
 - 3.8 Delays caused by actions on your part and not the fault of Boyles, including inaccessability to the drill site because of bad weather or conditions not under the control of Boyles.
4. Water truck rental will be charged at the rate of \$390.00 per month for a Boyles Bros. owned two-wheel drive truck plus \$.30 per mile, or \$460.00 per month for a four-wheel drive truck plus \$.35 per mile, or third party invoice plus 10% handling for outside rental. Water to be hauled by Boyles from your source of supply. If a steady driver is required, he will be charged at the rate of \$56.00 per eight-hour shift.
5. Core boxes, cement, drilling mud, mud additives, and lost circulation materials cemented will be charged at our published list prices plus 15% for mixing, handling, and transportation to the job site.
6. Casing will be invoiced at published list prices at time of installation in the hole. Any casing recovered will be credited at a mutually agreeable salvage value.
7. Drill roads and drill sites are to be constructed and maintained accessible to truck mounted drill rigs, supply trucks, and pickups free of cost to Boyles Bros. Any environmental responsibility relating to the construction, use or reclamation of same shall be the responsibility of Essex International. Boyles Bros. will, however, remove all trash and loose material, leaving drill sites in a clean and orderly condition.
8. Boyles Bros. certifies it has or will have licenses to do contract work in the state of Arizona. All other licenses, land and water use permits, environmental reports, state reports relating to hole plugging, etc. shall be the responsibility of Essex International. Boyles Bros. shall cooperate

Essex International, Inc.

November 11, 1974

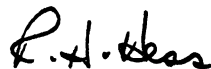
Page #3

with and give technical assistance if requested for your compliance with these regulations.

9. Boyles Bros. shall drill at the location and to the depths specified by the representative of Essex International and shall be held harmless for all liability claims which may arise from normal activity related to this contract, including pollution of ground water or surrounding land from discharge of drill water and wastes. Boyles Bros. agree to accept responsibility for the irresponsible acts of their employees and for the liability which may result from these acts.
10. The prices in this schedule will remain firm for a period of 30 days from the date of this proposal; at which time, if the contract has not been accepted, Boyles Bros. reserves the right to revise any prices or conditions of this offer.
11. Boyles Bros. will invoice at the end of each calendar month for the work done during such period and the terms will be net 30 days. In the event payment is not made within these terms, a late payment charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged. It will be computed from the due date to the date we receive payment.

Thank you for asking Boyles Bros. to quote on this work. If you have any questions concerning this proposal, please call either Mr. Mathews or myself.

Yours very truly,



R. A. Hess
Administrative Assistant to
Manager Operations

RAH:bg

cc: S. L. Mathews

Sand Core
to Bill

ES-31

COST TO DATE (11/21/74)

MOBILIZATION:	500.00
HOURLY RATE: (35.00/HR) CLEANING HOLE 71 HOURS	2485.00
MISC EXP: (ROCK BITS, ADDITIVE COST, WATER TRUCK RENTAL AND MILEAGE, ECT.)	1000.00
DRILLING: 200' @ 9.25 - 40' @ 11.25	TOTAL 2000.00
	<u>\$ 5985.00</u>

ESTIMATED COST TO END OF MONTH

APPROX 300' OF DRILLING @ 11.25/FT	3375.00
" MISC EXP	1000.00
CASING	<u>8000.00</u>
	12,375.00
	(11/21/74) COST TO DATE TOTAL 5985.00
	<u>TOTAL \$ 18360.00</u>

WE SHOULD BE ABLE TO BORE DRILL APPROX 300'
AFTER WE CASE THE HOLE & STILL BE WITHIN OUR
RFA LIMIT.

Bill

Memo

September 16, 1974

To: Robert Holt
From: Bob Helming

Subject: Geologic Evaluation of Essex mining claim
parcels near Safford, Arizona.

Per your request I have made a review of Essex property position in Safford by evaluating each parcel individually from a strictly geologic point of view. The result is a division of the parcels into four categories as listed below. An asterisk after the parcel number indicates ownership by Essex.

High Mineral Value

Parcel 20* San Juan

Low Mineral Value (defined by Essex drilling)

Parcel 2 Nail Keg 20-24
Parcel 4* Bohemia, et al
Parcel 16* D&L (Pickup)
Parcel 1 Nail Keg 1-19

Residual Exploration Potential for Deep Sulfides

Parcel 1 Nail Keg 1-19
Parcel 9 Big Ben
Parcel 10 Bardwell
Parcel 12 Key
Parcel 14* Copper Chief
Parcel 17 Soto State Lease

No Exploration Potential

Parcel 5 Cochino, Coffee
Parcel 6 Flat Top
Parcel 8 Lager
Parcel 11 Lead Hill
Parcel 15 Sandwash
Parcel 19* Big Bird, Copper Flat
Parcel 22 Blue Bell
Parcel ? Horseshoe

The principal factors considered were 1) results of Essex drilling; 2) proximity to known areas of high grade mineralization; 3) size of each parcel.

Bob Helming

Phone call
To Bob Helming
from EGA —

8-28-74

on order B. Holt

1. Shut down rig ES 31 p.m. today
2. Prepare a written recommendation on whether to proceed or not thru the fault at a take date & accompany the recommendation with sketch of X Section & estimate of cost.

90
165
165
615
1230

15
6
90

15
15
165

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 ROTARY DRILLING
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November 11, 1974

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November 11, 1974

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November 11, 1974

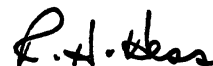
Page #3

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Yours very truly,



R. A. Hess
Administrative Assistant to
Manager Operations

RAH:bg

cc: S. L. Mathews

On Jan 3rd, 1975, while directing a bull dozer on Esser's new drill site near Tract 37, Bill Bowen, P. D. Geologist and a security guard named Grover (?) appeared, apparently checking out the new location. The main points of a conversation with Bill are as follows:

I first ~~opened~~ broached the subject of under ground drilling by P. D. by asking Bill about the Longyear ^{ADP} Drills in their 302 or 300 drift. Bill claimed they have no such drifts. He also claimed they have only one Longyear 44 and at no time did they ever have two Longyears drilling underground. He said the 44 is occupying the old machine shop and that they are using the drill for engineering purposes. He did admit they were drilling flat holes and the longest flat hole they have drilled is 1400' and that hole is parallel to the fault. He said the reason they secured the 44 was to replace the two CP45's which only had a capacity of 600'. He denied drilling into Tract 37 or into the general direction of the San Juan. For this information; the veracity of which is doubtful, he asked our depth on ES-31. I told him we were at 2600'. To this information he asked if we had found the fault as yet. I told him no and that fact has made us ~~to~~ reevaluate our geologic thinking. He responded by saying he knew we would not find the fault ~~by~~ because the structures do some very interesting things in the area of ES-31. He would not elaborate on this.

Pursuing the subject further, I said evidently the fault was not at 62° or 63° as we had always assumed but more like 70° to 75°. He absolutely denied this, saying they have done numerous 3 point problems and the fault is definitely at 62° and the reason we did not find the fault was because of the reasons given above. I said, well, we are at this point assuming the fault to be at 70° to 75° and are basing our thinking on the PD on Body with that in mind. He seemed most anxious.

to convince me the fault was at 62 degrees. My total impression as to why P.D. thinks we are drilling ES-31 was to test the fault. If this is true, then they are definitely worried about the information we are securing about the fault. And if they are worried on this point, then it follows they are worried about the whole implications as it pertains to their ore body and Tract 37.

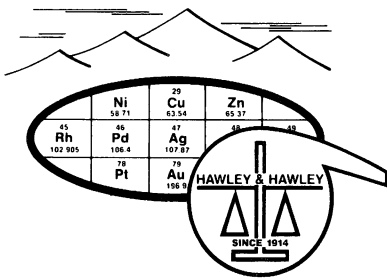
The rest of the conversation was in the nature of amonition and no other useful information was secured.

Bill Brown

Accumulated Summary Expenses
Safford Project

→ Over Period of Aug. 20, 1971 - DEC. 31, 1974

	Total	Area A P.D.	Projected S.F.	SAN JUAN AREA B Kennebec
1. Geological Study	59,099.24	40,000		19,099.24
2. Base Map	14,703.48	10,000		4,703.48
3. Drilling	611,694.67	551,000	16,000	60,694.67
4. Office Expense	19,802.12	16,802.12		3,000.00
5. Stock Purchase	99,750.00 (SAN JUAN)			
6. Assay	6710.81	5710.81		1000.
7. Consulting	10,309.03	7309.03		3000.00
8. Legal	261,241.43	41,241		220,000.43
9. Land	254,692.48	161,600		



SKYLINE LABS, INC.

Hawley & Hawley, Assayers and Chemists Division
 1700 W. Grant Rd., P.O. Box 50106, Tucson, Arizona 85703
 (602) 622-4836

Charles E. Thompson
 Arizona Registered Assayer No. 9427

William L. Lehmbeck
 Arizona Registered Assayer No. 9425

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Au oz/ton	Cu %							
1	00351	<0.005	0.03							
2	00352	<0.005	0.01							
3	00353	<0.005	0.03							

TO: Essex International, Inc.
 1704 West Grant Road
 Tucson, Arizona 85705

REMARKS: Single analysis

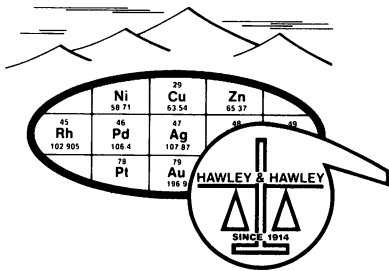
CERTIFIED BY: *William L. Lehmbeck*

Attn.: Mr. E. G. Heinrichs

DATE REC'D: 1/6/75

DATE COMPL.: 1/14/75

JOB NUMBER: 750026



SKYLAB LABS, INC.
 Hawley & Hawley, Assayers and Chemists Division
 1700 W. Grant Rd., P.O. Box 50106, Tucson, Arizona 85703
 (602) 622-4836

Charles E. Thompson
 Arizona Registered Assayer No. 9427

William L. Lehmbeck
 Arizona Registered Assayer No. 9425

CERTIFICATE OF ANALYSIS

ITEM NO.	SAMPLE IDENTIFICATION	Au oz/ton	Cu %							
1	00351	<0.005	0.03							
2	00352	<0.005	0.01							
3	00353	<0.005	0.03							

TO: **Essex International, Inc.**
 1704 West Grant Road
 Tucson, Arizona 85705

REMARKS: **Single analysis**

CERTIFIED BY:

Attn.: Mr. E. G. Heinrichs

DATE REC'D: **1/6/75**

DATE COMPL.: **1/14/75**

JOB NUMBER: **750026**

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



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

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 SPARKS, NEVADA
 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 MT. IRON, MICHIGAN
 SANTIAGO, CHILE
 cable: BOYLESBROS
 LIMA, PERU
 cable: BOYLESOP
 MEXICO CITY, MEXICO
 Telex: 001774548

INVOICE DATE: December 24, 1974
 ORDER NUMBER:
 INVOICE NUMBER: SW-279
 CONTRACT: 6-704
 TERMS: Net 30 Days
 LOCATION: N. of Safford, Arizona

Mr. Paul Wilson
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
ES-31	2158	2500	362	13.90	5,031.80
	2500	2623	123	15.40	1,894.20
Materials Used:	Mud No. 2		93 SKS.	3.90	362.70
	Driscose		6 SKS.	99.40	596.40
	Gaustic Soda		3 SKS.	18.15	54.45
	Soda Ash		7 SKS.	14.50	101.50
	Kalk Seal		11 SKS.	15.40	169.40
	Mixes Mud Seal		12 SKS.	10.55	126.60
	Barite (Baroid)		3 SKS.	5.20	15.60
	Mud Piber (Magoodar)		1 SK.	15.40	15.40
	Ambestos (Baroid)		1 SK.	17.58	17.58

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



CONTRACTORS-ENGINEERS

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 1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
 SALT LAKE CITY, UTAH 84110

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 MEXICO CITY, MEXICO
 Mex: 001774546

INVOICE DATE: December 24, 1974
 ORDER NUMBER: SW-279
 INVOICE NUMBER: 6-704
 CONTRACT: Not 30 days
 TERMS: Not 30 days
 LOCATION: N. of Safford, Arizona

Mr. Paul Blum
 Kaiser International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
	Ziegel (Beroid)		1 SK.	8.68	8.68
	lime (Beroid)		1 SK.	3.81	3.81
	Well-mnt - Medium (Beroid)		1 SK.	11.12	11.12
	Portland Cement		27 SKs.	2.65	71.55
	iring, handling, & transportation		15 %	1,554.79	233.22
	Cement, drilling, & steady time		95 Hrs.	35.00	3,325.00
	Water Truck Rental - 790.00 Per Mo.		24 Days	13.00	312.00
	Water Truck Hireage		744 Hrs.	.30	223.20
	Loads of Water		31 Loads	.75	23.25
			ROVAL BILLING		12,597.46

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	Kwik Seal		11 Sks.	15.40	169.40
	Dicks Mud Seal		12 Sks.	10.55	126.60
	Barite (Baroid)		3 Sks.	5.20	15.60
	Mud Fiber (Magobar)		1 Sk.	15.40	15.40
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 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Zeogel (Baroid)		1 SK.	8.68	8.68
	lime (Baroid)		1 SK.	3.81	3.81
	Wall-mnt - Medium (Baroid)		1 SK.	11.12	11.12
	Portland Cement		27 SKs.	2.65	71.55
	lking, handling, & transportation		15 %	1,554.79	233.22
	Cement, drilling, & standby time		95 Hrs.	35.00	3,325.00
	Water Truck Rental - 390.00 Per Mo.		24 Days	13.00	312.00
	Water Truck Mileage		744 Mi.	.30	223.20
	Loads of Water		31 Loads	.75	23.25
			ROYAL BILLING		12,597.46

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ARV DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLESCO MR PAUL EIMON

Telex: 388-321

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

INVOICE DATE: 12-24-74
 ORDER NUMBER: SW-279
 INVOICE NUMBER: 6.709
 CONTRACT: 30 days
 TERMS: 710 of Salt Lake
 LOCATION: 1704 W. Grant Ave
 Tuccoon Aug 85-905
 MR P
 1607

Hole No.	From	To	Footage	Rate	
ES-31	2158	2500	362	13.90	5019.180
	2500	2623	123	157.40	1894.20
	935X mud 2			3.90	362.70
	65X Drilled			99.40	596.40
	35X Concrete Soda			18.15	54.45
	70 SX Soda Ash			14.50	101.50
	11 SX Drill Seal			15.40	169.40
	12 SX Drills mud Seal			10.55	126.60
	3 SX Barite			5.20	15.60
	1 SX mud filled (m)			15.40	15.40
	1 SX Deleters			17.58	17.58

Boyles Bros

DIAMOND CORE DRILLING
 ROLLING DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT
 DRILLING ADDITIVES



CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
 SALT LAKE CITY, UTAH 84110

Cable: BOYLES CO MR. PAUL EIMON
 Telex: 388-321

BRANCH OFFICES
 PHOENIX, ARIZONA
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 IRONWOOD, MICHIGAN
 SANTIAGO, CHILE
 Cable: BOYLESBROS
 LIMA, PERU
 Cable: BOYLESBROS
 MEXICO CITY, MEXICO
 (BRX: 001774346)

Page - 2 -

12-24-74

INVOICE DATE: 12-24-74
 ORDER NUMBER: 56-279
 INVOICE NUMBER: 6-704
 CONTRACT: 30 days
 TERMS: 700 of supply
 LOCATION: 700 of supply

Energy International Inc
 1701 W. 25th Street
 Tucson Ariz 85705

MFB
 12/24/74

Hole No.	From	Footage	Rate	Total
ES = 31	1 SX 3000'		8.68	8.68
	1 SX Drilling		3.81	3.81
	1 SX Wall nut med.	11.12	11.12	11.12
	27 SX Portland Cement	2.65	71.55	
	95 hrs Cement Drilling Time + Standby	35.00	3335.00	
	24 days water table Rental 390 mo.	13.00	312.00	
	744 miles Road Water Table Mileage	30.00	223.20	
	31 loads water at	75	23.25	
	Mining, Handling, & Transportation	15%	1554.79	
				233.22
				12597.46

DIAMOND CORE DRILLING
 REGULAR DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
 SALT LAKE CITY, UTAH 84110

Cable: BOYLESKO

Telex: 388-321

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

PAGE --2--

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Saford, Arizona

Mr. Paul Himon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Formaldehyde		20 Gal.	35.00	700.00
	Miracle Lime (Baroid)		1 Sk.	3.81	3.81
	Portland Cement		20 Sks.	2.65	53.00
	Mixing, handling, & Transportation		15 %	1,595.38	239.31
	Water		22 Loads	.75	16.50
	Rock Bit - 5 7/8		1	142.00	142.00
	3 1/2 Casing Black		2105 Ft.	3.80	7,999.00
	3 1/2 Casing Shoe Float		1	55.00	55.00
	4" Plug		1	13.00	13.00
	Water Truck Rental - 390.00 Per Mo.		18 Days	13.00	234.00
	Water Truck Mileage		484 Mi.	.30	145.20

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLES CO

Telex: 388-321

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 IRONWOOD, MICHIGAN
 SANTIAGO, CHILE
 Cable: BOYLESBROS
 LIMA, PERU
 Cable: BOYLES COP
 MEXICO CITY, MEXICO
 Telex: 001774546

PAGE -3-

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Hole No.

ES-31 NX

From

2105

To

2158

Footage

53

Rate

13.90

Total

736.70

Mobilization to Safford

500.00

500.00

TOTAL BILLING

18,802.34

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



1624 Pioneer Road
 SALT LAKE CITY, UTAH 84110

Cable: BOYLESCO
 Telex: 388-371

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

INVOICE DATE: **January 7, 1975**
 ORDER NUMBER: **SM-296**
 INVOICE NUMBER: **6-704**
 CONTRACT: **Net 30 Days**
 TERMS: **Net 30 Days**
 LOCATION: **North of Safford, Arizona**

Mr. Paul Blanton
 ESSEX International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
ES-31	2623	2745	122	15.40	1,878.80
Materials Used:					
	Rod Tube (Magcobar)		5 Cans	20.10	100.50
	Spersene (Magcobar)		2 Skts.	21.94	43.88
	Formaldehyde		1 Skt.	35.00	35.00
	DNA-585		1 Can	33.10	33.10
Freight & Handling			15 %	212.48	31.87
Water Truck Rental - 390.00 Per Mo.			7 Days	13.00	91.00
Water Truck Mileage			24 MI.	.30	7.20
			TOTAL BILLING		2,221.35
FINAL INVOICE ES-31					

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



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: BOYLESBROS
 MEXICO CITY, MEXICO
 TELEX: 001774546

INVOICE DATE: 1-7-75
 ORDER NUMBER: SW-296
 INVOICE NUMBER: 6-704
 CONTRACT: No. 3004
 TERMS: No. 3004
 LOCATION: No. 3004

E. Albee International Inc.
 1704 W. Grant Ave.
 Tucson Ariz. 85705

Hole No.	From	To	Footage	Rate	Total
65-31	2623	2745	122	15.40	1878.80
	Jeanie Rod Kula (M) 8 SX Spreaus (M) 1 Formdehyde 1 can. Out fits 7 day Water Rental 24 hrs. to Mileage 10 hrs. Logging down 15% of material used Final Invoice ES-31				
			390.5m.	3.00 c.d.	91.00
			30	35.00	7.20
				212.48	31.87
				35.00	350.00
					2221.35
					1997.00
					1997.00

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT



CONTRACTORS-ENGINEERS

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

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 MT. IRON, MICHIGAN
 SANTIAGO, CHILE
 cable: BOYLESBROS
 LIMA, PERU
 cable: BOYLESBROS
 MEXICO CITY, MEXICO
 (MEX. 001774546)

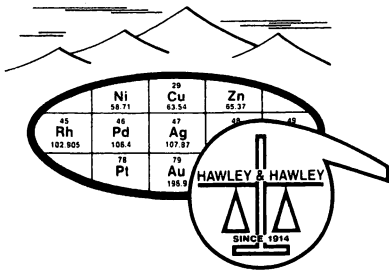
INVOICE DATE: **January 7, 1975**
 ORDER NUMBER: **SM-296**
 INVOICE NUMBER: **6-704**
 CONTRACT: **Net 30 Days**
 TERMS: **Net 30 Days**
 LOCATION: **North of Safford, Arizona**

Mr. Paul Nixon
 ESSEX International, Inc.
 1704 N. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
ES-31	2623	2745	122	15.40	1,878.80
Materials Used:	Red Lube (Magsober)		5 Cans	20.10	100.50
	Spersens (Magsober)		2 Sks.	21.94	43.88
	Formaldehyde		1 Sk.	35.00	35.00
	IRM-585		1 Can	33.10	33.10
Freight & Handling			15 %	212.48	31.87
Water Truck Rental - 390.00 Per Mo.			7 Days	13.00	91.00
Water Truck Mileage			24 MI.	.30	7.20
RYAL BILLING					2,221.35

RYAL INVOICE ES-31

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.



SKYLINE LABS, INC.

Hawley & Hawley, Assayers and Chemists Division
 P.O. Box 50106 • 1700 West Grant Road
 Tucson, Arizona 85703
 (602) 622-4836

INVOICE

INVOICE NO.:
 JOB NO.: 750026
 P.O. NO.:

SOLD TO: Essex International, Inc.
 1704 West Grant Road
 Tucson, Arizona 85705

DATE: January 14, 1975

Attention: Mr. E. G. Heinrichs

TERMS: NET 30 DAYS

Analysis of 3 Rock Chip Samples

Single analysis

3 Gold (fire assay) @ \$4.00.....	\$12.00
3 Copper @ \$2.00.....	6.00
	18.00
Sub Total	18.00
3 Samples crushed, split and pulverized @ \$1.65.....	4.95
(sample wt 6 lbs: 1st lb @ \$0.90, >1 lb add \$0.15/lb)	4.95
Total	\$22.95



Hole ES-31

2500

400'

STRONG Py - Biotite

INCREASING Chalco

Pyrite zone

Date Started ^{Drilling} Nov 19th

Date Logging Started Nov 29th

Footage at end of ~~Nov 29th~~ 2105'
(According to bill)

Actual 2118'
at end of Nov
not billed

DRILL 1000' MORE

We invite you to

THESE FINE HILTON INN FACILITIES

THE PENTHOUSE THE RIVER ROOM
THE CLIFF LOUNGE

MEMO

September 6, 1974

TO: Robert Holt
FROM: Bob Helming

SUBJECT: Status of drill hole ES-31 on the Nail Keg 3 claim.

The included sketch map indicates the location of drill hole ES-31 which was recently drilled to 1800 feet to fulfill assessment requirements on the Nail Keg, Bohemia and other contiguous claim groups.

So far as Essex knows there is an information gap in the area between the San Juan and PD ore bodies and adjacent to the Butte Fault on the north or footwall side. Information from this area could determine what, if any, connection exists between the San Juan and PD ore bodies at depth. From a somewhat more speculative viewpoint the data could aid in defining the shape, position and dimensions of the PD ore body since it is now apparent that PD is doing considerable underground drilling to answer those same questions. All of this data would significantly affect any future decisions concerning Essex land position in the Safford area.

The best way to test the area would have been to drill north of the fault on the San Juan property. This was impossible due to legal problems therefore the alternative was to collar a hole at the present site of ES-31 and attempt to drill through the fault to test the ground beneath the fault. The drill hole should penetrate the fault at approximately 2300 feet assuming a dip of 65 degrees for the fault. We can expect large fracture zones on both sides of the fault plane. The hole was rotary drill 5 3/4 inches diameter to 1800 feet and then filled with drilling mud. No casing was emplaced so the hole may be continued by rotary drill through the fault and then cased.

The biotite-chlorite alteration and mineralization of trace to locally moderate copper oxide in the hanging wall was anticipated based on prior knowledge of nearby outcrops and drill holes. A more detailed log will be prepared when assays are available.

Drill hole ES-31 was stopped on August 28 because the necessary money had been spent for assessment work on the claim group. I recommend Essex continue the hole as soon as a satisfactory drill can be contracted for the following reasons:

- 1) The hole is testing the last area on the claim group where there is insufficient data to form a reasonable geologic conclusion.

- 2) It seems very probable that Essex will maintain its property position for some time and will eventually have to do next years assessment work.
- 3) The longer the hole is left standing the less likely it can be reentered although it appeared to be in good condition.
- 4) The project geologist is presently located in Safford to handle the drilling.

Arguments against continuing the hole now are:

- 1) The claims may be dropped before we have to do next years assessment work.
- 2) No valid target exists and it is an expensive method of data collecting.
- 3) There is the unlikely possibility that PMC could subpoena the drill hole data because the hole is collared only 65 feet from the San Juan property.

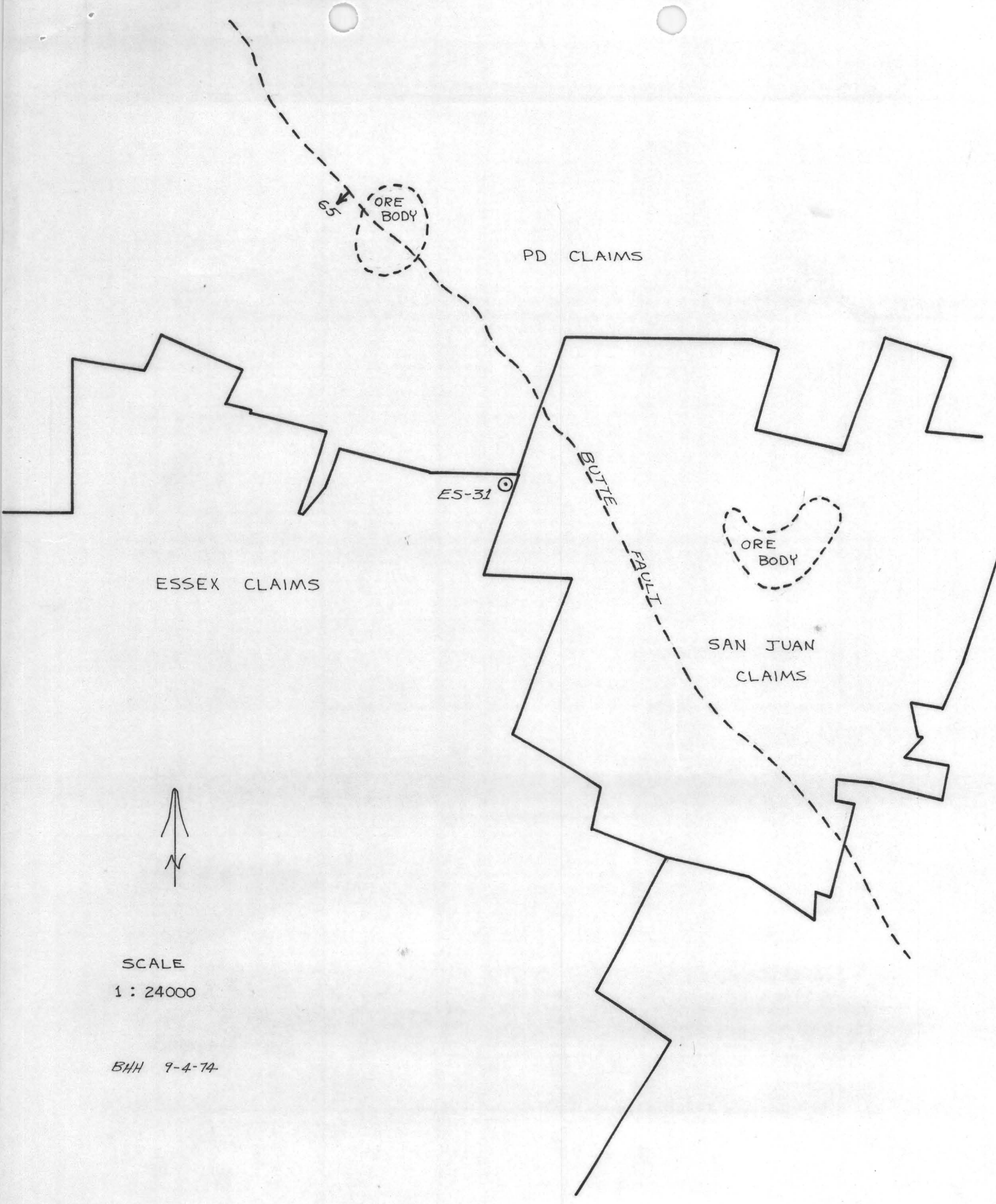
Drilling through a major fault at depths exceeding 2000 feet will be a formidable task therefore nothing smaller than a Boyles Bros. DMX drill should be considered. Following are some cost estimates assuming the hole is rotary drilled to 2600 feet, cased with 3½ inch pipe and cored Nx to 3500 feet.

Rotary drilling to 2600 feet	\$ 9,500
Additives, bits, water truck, etc.	\$ 6,000
Casing	\$11,700
Coring 2600 to 3500 feet	\$15,000
Additives, bits, water truck, etc.	\$ 8,000
Total	<u>\$50,200</u>

The cost of the hole should be compared to the semi-annual property payments for these claim groups of approximately \$65,000. Furthermore, if the hole is drilled now the major portion of the assessment work would be done until July of 1976.

Bob Helming
Project Geologist
Safford, Arizona

RACERAST BOUND
SOUTHWORTH, ARIZONA



ORE BODY

PD CLAIMS

ESSEX CLAIMS

ES-31

BUIE FAULT

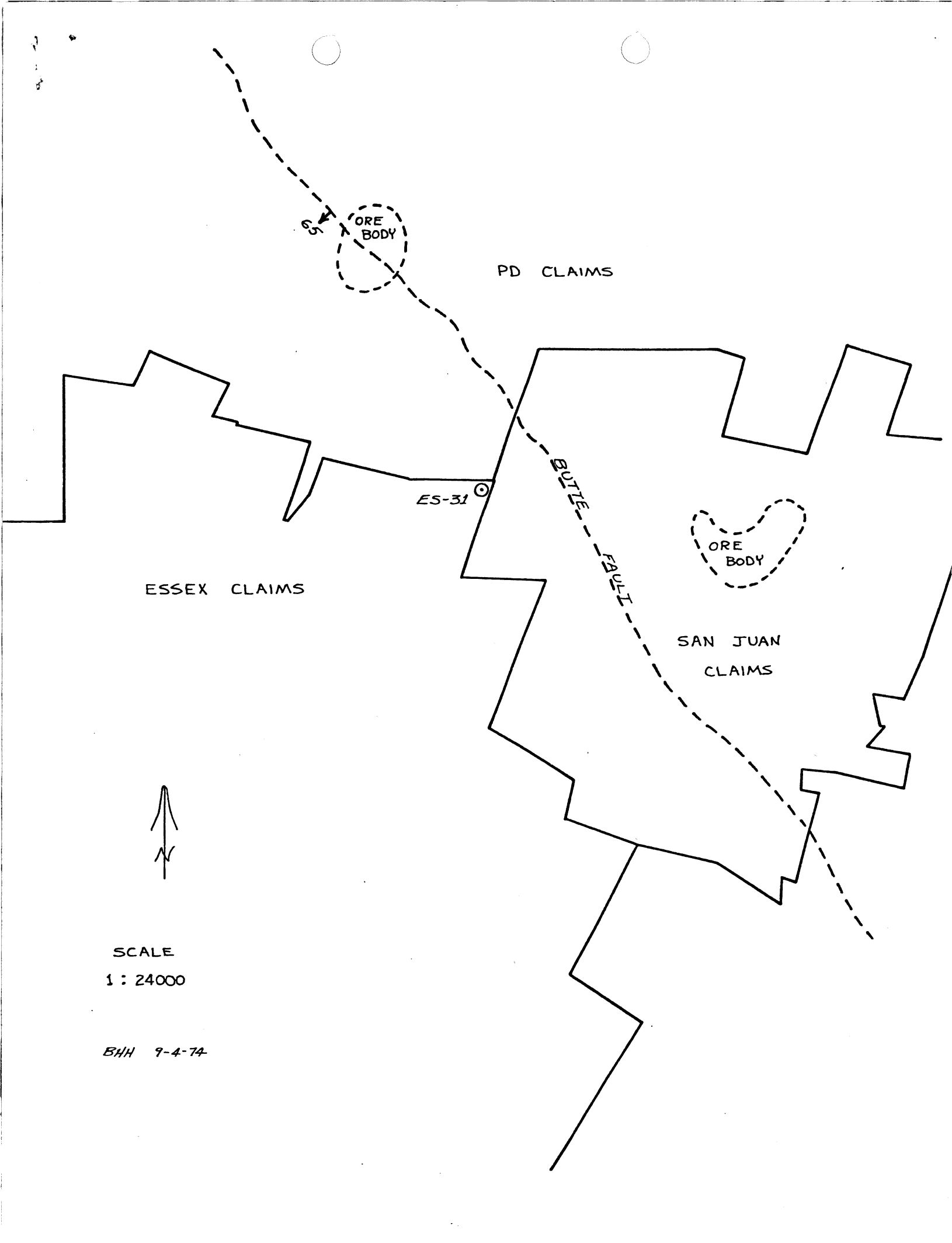
ORE BODY

SAN JUAN CLAIMS



SCALE
1 : 24000

BHH 9-4-74



S A
ORE BODY

PD CLAIMS

ESSEX CLAIMS

ES-31

BUTTE FAULT

ORE BODY

SAN JUAN CLAIMS



SCALE
1 : 24000

BHH 9-4-74

FROM THE DESK OF:

E. Grover Heinrichs

Hole ES-31

Stopped

1/6/74

Depth 2745'

SPEED MEMO

To

Dick Kelly

At

As above

Subject

RFA Safford Proj.

Date

2/1/78

Enclosed are the following

R.F.A.

- 1) P.D. Area 37889.48
- 2) Kennebec Area 13,600.⁰⁰
- 3) San Juan Area 23,400.⁰⁰

Please submit for corporate approval. Please note the attached payment schedule which will be

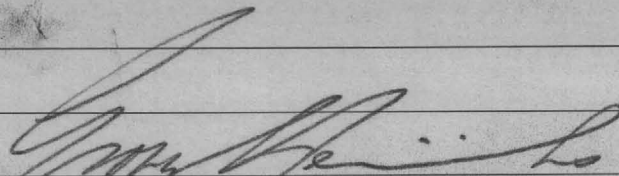
PLEASE REPLY TO  Signed

At

good for comparison with your info. If you have any questions please let me know.

Date

Signed



ACT 002

SENDER'S COPY

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-¹³~~18~~-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. 8521

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2523
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD box mud 2
TYPE 1 Sub Seal
CAL-SEAL _____
LUMNITE 1 milds lime
PORTLAND 145X portland
ADDITIVES _____
WATER 2 loads

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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)

~~start drilling at 10:00 AM~~
~~10:00 AM~~
~~10:00 AM~~
~~10:00 AM~~
cement job
trip in + washing as cement wash
down

DRILLER Al Keku HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-16-74
SHIFT DAY v SWING _____ NITE _____ HOLE NO. ES 24

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2523 LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) start up swing
shift didn't show up got O instead
wash down to 110 ft from bottom
core 30 ft + trip rods WFB

DRILLER al Dehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-18-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. E3-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2523
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD #2 - 18 SACKS
TYPE DICK'S MUD 5 SACKS 2 SACKS
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 4 LOADS

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

TIME CHARGES

DRILLING _____ CEMENTING 14
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN 14 WATER DELAY _____
MIXING MUD 14 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) drill out ^{156 ft.} cement down to 2 ft. from bottom, lost ~~circulation~~ circulation.

DRILLER John Bergstedt HELPER Louis
MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-17-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES:31

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 _____ CEMENTING
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 4
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) Circ problems
Haul water

DRILLER Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-18-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ ^{5.00} MUD 3-BARITE
STICKUP, END OF SHIFT _____ TYPE 1-SAIL Gel [Zeagel]
DEPTH, END OF SHIFT _____ CAL-SEAL 1-MUD Fiber
DEPTH, START OF SHIFT _____ LUMNITE 1-Dicks Mudseal
DRILLED _____ PORTLAND 2-Kwik-Seal Med.
CORE RECOVERED _____ ADDITIVES 1-Asbestos
TYPE OF ROCK _____ WATER 1-lime
NUMBER OF RUNS _____ 1-Wall-NUT [Med.]

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) Pump plug down
Wash 200 ft out to Bottom

DRILLER Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-18-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2524
DEPTH, START OF SHIFT 2523
DRILLED 1
CORE RECOVERED 1
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD Soda ASA - 1 SACK
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER -1 LOAD

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

TIME CHARGES

DRILLING 8' 7 CEMENTING _____
REAMING _____ Circulation
EQUIP. REPAIR 1
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 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) tripped rods out
inner barrel wedged in core barrel with
lost circulation material.

DRILLER John Bergquist HELPER Louis

MACHINE NO. _____ FOREMAN _____
7

● OYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-19-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES31

RODS, END OF SHIFT _____ MUD 15 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Driscoll
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT _____ LUMNITE _____
DRILLED _____ PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 3 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING _____ CEMENTING Cue 10
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 248 1/4
BIT CONDITION _____ REASON FOR RETIRING _____ 2

REMARKS (Explain delays and hole condition) pump plug⁵ down
again + wash to bottom
got 100% cue

DRILLER W Hebe HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

OYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-19-74
 SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

2 FT. STICK UP.

RODS, END OF SHIFT _____
 STICKUP, END OF SHIFT _____
 DEPTH, END OF SHIFT 2553
 DEPTH, START OF SHIFT 2524
 DRILLED 29
 CORE RECOVERED 29
 TYPE OF ROCK _____
 NUMBER OF RUNS 3

MUD #2 - 10 SACKS
SOLO AFD
 TYPE - 3 SACKS
DIPS MUD SEAL
 CAL-SEAL - 1 SACK
 LUMNITE _____
 PORTLAND _____
 ADDITIVES _____
 WATER - 4 LOADS

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

TIME CHARGES

DRILLING 8 _____ CEMENTING 2 _____
 REAMING _____ EQUIP. REPAIR _____
 CASING _____ STAND-BY OR SURVEY _____
 SET-UP, TEAR DOWN _____ WATER DELAY _____
 MIXING MUD _____ 10 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) Finish Washing on Bottom

DRILLER John Bergstedt HELPER Louis
 MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-20-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 0567
DEPTH, START OF SHIFT 2553
DRILLED 14
CORE RECOVERED 14
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD 3 Mud 2
TYPE _____
CAL-SEAL 1 Soda Ash
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 2 loads

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

TIME CHARGES

DRILLING 10 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) Hard Water to fill up bits drilling slower than H

DRILLER Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-20-74
SHIFT DAY _____ SWING ✓ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2592
DEPTH, START OF SHIFT 2567
DRILLED 25
CORE RECOVERED 25
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD red lube - 5 GALLONS
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) finish tripping rods out change bit, trip rods in new bit 2567

DRILLER John Borgstadt HELPER Louis
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-23-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE 2 Rod Luber
DEPTH, END OF SHIFT 2620 CAL-SEAL 1 CMC
DEPTH, START OF SHIFT 2592 LUMNITE _____
DRILLED 28 PORTLAND _____
CORE RECOVERED 28 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 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) _____

DRILLER Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-23-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. E5-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2623 CAL-SEAL _____
DEPTH, START OF SHIFT 2620 LUMNITE _____
DRILLED _____ 3 PORTLAND _____
CORE RECOVERED _____ 3 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 1

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

TIME CHARGES

DRILLING 8 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 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) trip rods out & change bit, lower rods in 2100 feet new bit at 2623. drilled 3 feet in 2 hours.

DRILLER John Baptista HELPER Louis
MACHINE NO. _____ FOREMAN _____

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-2-75
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2638
DEPTH, START OF SHIFT 2623
DRILLED 15
CORE RECOVERED 15
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE 1 Rod Lube
CAL-SEAL Sparson
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 load

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

TIME CHARGES

DRILLING 10
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 Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____
7

BOULES BROS. DRILLING CO.
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12 5-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2345
DEPTH, START OF SHIFT 2320
DRILLED 25'
CORE RECOVERED 25'
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD 2 mud 2
TYPE 1 Soda Ash
CAL-SEAL 1 Dupk mud Seal
LUMNITE 1 Rod Lube
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Hehr HELPER Dave
MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-5-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2365
DEPTH, START OF SHIFT 2345
DRILLED 20
CORE RECOVERED _____
TYPE OF ROCK HARD
NUMBER OF RUNS 2

MUD #2 - 1 SACK
rod tube - 5 gal
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 10 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) trip rods out to
run different type of bit, new bit
2365

DRILLER John Bergstad HELPER Tom
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-6-74
SHIFT DAY V SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2393 CAL-SEAL _____
DEPTH, START OF SHIFT 2365 LUMNITE _____
DRILLED 28 PORTLAND _____
CORE RECOVERED 28 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) lower rods in & start drilling

DRILLER AL HELPER DAVE
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-6-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2411 CAL-SEAL _____
DEPTH, START OF SHIFT 2393 LUMNITE _____
DRILLED 18 PORTLAND _____
CORE RECOVERED 18 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 7 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 3 _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 _____ 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 John Bergstedt HELPER Tom
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-9-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2439
DEPTH, START OF SHIFT 2411
DRILLED 28
CORE RECOVERED 28
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD 2 mud 2
TYPE 1 Drical
CAL-SEAL 1 Soda Ash
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Hehn HELPER Dave

MACHINE NO. 7 FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SHAFFORD DATE 12-9-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2469 CAL-SEAL _____
DEPTH, START OF SHIFT 2439 LUMNITE _____
DRILLED 30 PORTLAND _____
CORE RECOVERED 30 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) drain pumps for the night, put wire line back on shiv wheels,

DRILLER John Bergstedt HELPER Sterling
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-10-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2487
DEPTH, START OF SHIFT 2469
DRILLED 18
CORE RECOVERED 18
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD _____
TYPE 2 mud @ Lub-o-lube
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 load

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

TIME CHARGES

DRILLING 10 _____ 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) trip rods out

DRILLER Del Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-10-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2503 CAL-SEAL _____
DEPTH, START OF SHIFT 2487 LUMNITE _____
DRILLED 16 PORTLAND _____
CORE RECOVERED 16 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 8 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) trip rods in & start drilling, new bit at 2487 lost circulation at 2503

DRILLER John Bergstadt HELPER Rouss Romero
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-11-74
SHIFT DAY 2 SWING _____ NITE _____ HOLE NO. 8531

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2520
DEPTH, START OF SHIFT 2503
DRILLED 18
CORE RECOVERED 18
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 12¹ mud 2
TYPE 4 Bulk Seal
CAL-SEAL 4 Bulk mud Sec
LUMNITE 1 Soda Ash
PORTLAND _____
ADDITIVES _____
WATER Silvada's

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

TIME CHARGES

DRILLING 5 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ air STAND-BY OR SURVEY 5 _____
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) _____

DRILLER Al Hebe HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-204 LOC. Safford DATE 12-11-71
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2523
DEPTH, START OF SHIFT 2520
DRILLED 3
CORE RECOVERED 3
TYPE OF ROCK _____
NUMBER OF RUNS 1

MUD 6 mud 2
TYPE 4 Gunk Seal
CAL-SEAL 2 Dick's Mud Seal
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 2 loads

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

TIME CHARGES

DRILLING 1 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ ^{Circ} ~~STAND-BY~~ OR SURVEY 9
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) trip rods out to cement hole

DRILLER John Bergstadt HELPER Louis

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-12-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

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 #2-5-SACKS
~~TYPE~~ PRISCOSE-1-SACK
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING _____ CEMENTING 7
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) go in hole
cement, cement went out formation.
Haul water fill the pits

DRILLER John Borgstuel HELPER Louis
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-12-74
SHIFT DAY SWING NITE HOLE NO. ES 31

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 mud 2.
TYPE 1
CAL-SEAL _____
LUMNITE _____
PORTLAND 135 x portland
ADDITIVES _____
WATER 2 loads

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

TIME CHARGES

DRILLING _____ CEMENTING 10
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) cup in wash pipe cement water of

DRILLER Al Hehr HELPER Dave

MACHINE NO. 7 FOREMAN _____

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-2-75
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD 1 Rod Tube
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2665 CAL-SEAL _____
DEPTH, START OF SHIFT 2638 LUMNITE _____
DRILLED 27 PORTLAND _____
CORE RECOVERED 27 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 3

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

TIME CHARGES

DRILLING 10 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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 John Bergstedt HELPER Rick Merrill
MACHINE NO. _____ FOREMAN _____
7

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-3-75
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. ES31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE 1 Rod Lube
DEPTH, END OF SHIFT 2685 CAL-SEAL _____
DEPTH, START OF SHIFT 0665 LUMNITE _____
DRILLED 20 PORTLAND _____
CORE RECOVERED 20 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 6 CEMENTING _____
REAMING _____ EQUIP. REPAIR 3
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 9 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) Change oil on all ~~the~~ holes

DRILLER Al Hebe HELPER Dave
MACHINE NO. _____ FOREMAN _____

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 1-3-75
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2705 CAL-SEAL _____
DEPTH, START OF SHIFT 2685 LUMNITE _____
DRILLED 20 PORTLAND _____
CORE RECOVERED 20 ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2

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

TIME CHARGES

DRILLING 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) alot of mud rings on every run, had trouble with mud rings.

DRILLER John Borgtaedt HELPER Rick Merrill
MACHINE NO. _____ FOREMAN _____
7

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 1-4-75
SHIFT DAY SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2715
DEPTH, START OF SHIFT 2705
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 1 Dispersion
TYPE 1 Rod Tube
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

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

CEMENTING _____
EQUIP. REPAIR 2 _____
STAND-BY OR SURVEY _____
WATER DELAY (6) _____
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 Al Hehr HELPER Dave

MACHINE NO. _____ FOREMAN _____

DOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SARFOEN DATE 1-4-75
SHIFT DAY _____ SWING V NITE _____ HOLE NO. LS 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2735
DEPTH, START OF SHIFT 2715
DRILLED 20
CORE RECOVERED 20
TYPE OF ROCK _____
NUMBER OF RUNS 2

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

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

TIME CHARGES

DRILLING 6 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 6 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) trip rods out to change bit new bit at 2735.

DRILLER John Bergstedt HELPER Rich Merrill
MACHINE NO. _____ FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-26-79
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2105 _____
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 6-mud 2 _____
TYPE _____
CAL-SEAL _____
LUMNITE 1 Caustic Soda _____
PORTLAND _____
ADDITIVES _____
WATER 1 load _____

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

TIME CHARGES

DRILLING _____ CEMENTING 4 _____
REAMING _____ EQUIP. REPAIR 4 _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 8 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) Haul Core pipe from other locations to set up casing

DRILLER Al Herb Tom HELPER Louis

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-27-74
SHIFT DAY 2 SWING _____ NITE _____ HOLE NO. ES-31

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

TIME CHARGES

DRILLING _____ Hourly
CEMENTING _____ 4
REAMING _____ EQUIP. REPAIR _____ 4
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 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) Cut of Casing
Set Pump & Hook up for Casing

DRILLER Al Hehr HELPER Louis
MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

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 SX mud
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 3 loads

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

TIME CHARGES

DRILLING _____ Hourly
CEMENTING 8
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) Lower pipe in 2000 ft & mix mud.

DRILLER Tom John HELPER Sterling
MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-29-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2118
DEPTH, START OF SHIFT 2105
DRILLED 13
CORE RECOVERED 13
TYPE OF ROCK _____
NUMBER OF RUNS 2

MUD 3 mud 2
TYPE 1 Driscoll
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 3 loads

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

TIME CHARGES

DRILLING 4 HOURS 4
CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ (8) 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) Drillout cement
+ plug 30 ft cement to Drilled out

DRILLER Al Behr John HELPER Louis
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Salford DATE 11-29-74
SHIFT DAY _____ SWING C NITE _____ HOLE NO. E5-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2138 _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2118 _____ LUMNITE _____
DRILLED 20 _____ PORTLAND _____
CORE RECOVERED 20 _____ ADDITIVES _____
TYPE OF ROCK _____ WATER _____
NUMBER OF RUNS 2 _____

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

TIME CHARGES

DRILLING 8 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING 9 _____ 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) _____

DRILLER Tom Bergstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC Safford DATE 12-2-74
SHIFT DAY SWING NITE HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2160
DEPTH, START OF SHIFT 2138
DRILLED 22
CORE RECOVERED 27
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 4 mud 2
TYPE 1 Prisco
CAL-SEAL _____
LUMNITE 1 Caustic
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 8 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) _____

DRILLER al Hehi HELPER David
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-2-74
SHIFT DAY _____ SWING ✓ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____	MUD _____
STICKUP, END OF SHIFT _____	TYPE _____
DEPTH, END OF SHIFT <u>2200</u>	CAL-SEAL _____
DEPTH, START OF SHIFT <u>2160</u>	LUMNITE _____
DRILLED <u>40</u>	PORTLAND _____
CORE RECOVERED <u>40</u>	ADDITIVES _____
TYPE OF ROCK _____	WATER _____
NUMBER OF RUNS <u>4</u>	

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

TIME CHARGES

DRILLING <u>8</u>	CEMENTING _____
REAMING _____	EQUIP. REPAIR _____
CASING <u>8</u>	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) _____

DRILLER Tom Borgstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____
7

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-204 LOC. Safford DATE 12-3-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2230
DEPTH, START OF SHIFT 2200
DRILLED 30
CORE RECOVERED 30
TYPE OF ROCK _____
NUMBER OF RUNS 3

MUD 3 mud 2
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1-load

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

TIME CHARGES

DRILLING 10 _____ 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) _____

DRILLER Al Weber HELPER Dave

MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-3-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2269
DEPTH, START OF SHIFT 2230
DRILLED 39
CORE RECOVERED 39
TYPE OF ROCK _____
NUMBER OF RUNS 4

MUD 1 caustic soda
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 load

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

TIME CHARGES

DRILLING 10 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 _____ 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 John Bergstedt ~~Tom~~ HELPER Tom
MACHINE NO. _____ FOREMAN _____
7

BOULES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 12-4-78
SHIFT DAY SWING NITE HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD 3 mud 2
STICKUP, END OF SHIFT _____ TYPE 1 Prical
DEPTH, END OF SHIFT 2295 CAL-SEAL 1 Dick's mud Seal
DEPTH, START OF SHIFT 2269 LUMNITE _____
DRILLED 26 PORTLAND _____
CORE RECOVERED 26 ADDITIVES _____
TYPE OF ROCK HARD WATER 1 lead
NUMBER OF RUNS 3

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) repack Swivel

DRILLER Al Hehr HELPER Dave
MACHINE NO. 7 FOREMAN _____

BOYLES BROS. DRILLING COMP.
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 12-4-74
SHIFT DAY _____ SWING V NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT 10 FT. ST. UP.
DEPTH, END OF SHIFT 2320
DEPTH, START OF SHIFT 2295
DRILLED 25
CORE RECOVERED 25
TYPE OF ROCK TMF
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 10 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 10 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) trip rods out, change bit & core barrel, trip rods in & start drilling. new bit 2295

DRILLER John Borgstadt HELPER Tom

MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-19-74
SHIFT DAY _____ SWING _____ NITE HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 1945
DEPTH, START OF SHIFT 1835
DRILLED 110
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

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

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

TIME CHARGES

DRILLING 12 _____ 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) belly hose broke

DRILLER Tom Borgstadt HELPER ^{FRANK} 4 Sterling
MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-20-74
SHIFT DAY L SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 1985 CAL-SEAL _____
DEPTH, START OF SHIFT 1945 LUMNITE _____
DRILLED 40 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 12 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 12 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) repair Kelly hose +
trip rods out. got rod hung hole
caving at 1500 to 1574

DRILLER John Berglund 12 hrs HELPER Louis Dhas Frank 4 hrs
MACHINE NO. _____ FOREMAN _____

BOES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-20-74
SHIFT DAY _____ SWING _____ NITE ✓ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2040
DEPTH, START OF SHIFT 1985
DRILLED 55
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 12 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 12 WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE 5 7/8 R.B. OVERSIZE _____ ON 1985 OFF _____
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) full rock change
bits run in with 5 7/8 R.B.
About 30' of save in bottom of hole

DRILLER Tom Borgstadt HELPER Franky, Sterling
MACHINE NO. 7 FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-21-74
SHIFT DAY SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2045
DEPTH, START OF SHIFT 2040
DRILLED _____ 5 _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD 2 mud 2.
TYPE _____
CAL-SEAL 1 5% Caustic Soda
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 load

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

TIME CHARGES

DRILLING 4 _____ 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) Condition mud med to Heavy

DRILLER al Heku HELPER Louis 4

MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-709 LOC. Safford DATE 11-21-79
SHIFT DAY _____ SWING _____ NITE ✓ HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT _____ CAL-SEAL _____
DEPTH, START OF SHIFT 2080 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 6 CEMENTING _____
REAMING _____ EQUIP. REPAIR 2
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ 9 WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE 5 7/8 RB OVERSIZE _____ ON _____ OFF _____

SHELL NO. _____ TYPE _____ ON _____ OFF _____

BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Pull out rest of the way Run in with new bit plug bit hose, same unalone pull back a little ways repair hose bit same unplugged

DRILLER Tom Borgstodt HELPER Sterling

MACHINE NO. _____ FOREMAN _____

BOES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAYFORD DATE 11-21-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 2030
DEPTH, START OF SHIFT 2045
DRILLED 35
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

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

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

TIME CHARGES

DRILLING 12 _____ 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) ~~Disalocmc~~

DRILLER John Borgstedt 12 hrs HELPER Louis 4 hrs Frank 8 hrs
MACHINE NO. 7 FOREMAN _____

BOES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____ MUD _____
STICKUP, END OF SHIFT _____ TYPE _____
DEPTH, END OF SHIFT 2105 CAL-SEAL _____
DEPTH, START OF SHIFT 2080 LUMNITE _____
DRILLED 25 PORTLAND _____
CORE RECOVERED _____ ADDITIVES _____
TYPE OF ROCK _____ WATER 2 loads
NUMBER OF RUNS _____

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

TIME CHARGES

DRILLING 7 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR 1 _____
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) run rod in
wash down 200 ft fill repair
Kelley Hose

DRILLER Al Hehr 8 HELPER Louis 8

MACHINE NO. _____ FOREMAN _____
7

BOEES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. _____

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 Ⓢ 4 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY Ⓢ 4 _____
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) Ray down pipe getting stuck pipe out cant drill with rock bit Hole Caving Bad Broke chain on rig & 4 pad line

DRILLER John Bergstedt HELPER Frank Byron

MACHINE NO. 7 FOREMAN _____

BOULES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-22-74
SHIFT DAY _____ SWING ✓ NITE _____ HOLE NO. ES-31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2105
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 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 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) _____

DRILLER John Borgetal HELPER Frank Byram
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-22-74
SHIFT DAY _____ SWING _____ NITE ✓ HOLE NO. ES-31

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

TIME CHARGES

DRILLING _____ ? CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ 8 STAND-BY OR SURVEY 8
SET-UP, TEAR DOWN _____ 8 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) lay down drill pipe, prepare to case

DRILLER Tom Bergsteadt HELPER Sterling
MACHINE NO. 7 FOREMAN _____

BOULES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-23-74
SHIFT DAY ✓ SWING _____ NITE _____ HOLE NO. _____

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2105
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 Ⓟ _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR 4 _____
CASING _____ STAND-BY OR SURVEY 6 _____
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) Haul casing
lighten collar on casing put new
cable on Kelly line

DRILLER Al Helm ⁹ Jahn ⁸ HELPER Louis ¹⁰ Ford ⁸

MACHINE NO. 7 FOREMAN _____

BOULES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-25-74
SHIFT DAY SWING NITE HOLE NO. 2531

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT _____
DEPTH, START OF SHIFT 2105
DRILLED _____
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

MUD _____
TYPE 1 casing shoe
CAL-SEAL 1 mile lime
LUMNITE _____
PORTLAND 20 portland
ADDITIVES 1 4 in plug
WATER 2 loads

FEET CASED _____ FROM 0 TO 2105 SIZE 3 1/2 ID
FEET REAMED _____ FROM _____ TO _____ SIZE _____
CEMENT DRILLED _____ FROM _____ TO _____

TIME CHARGES

DRILLING _____ CEMENTING 2 hrs
REAMING _____ EQUIP. REPAIR _____
CASING 15 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) Case hole drill
down to get casing on bottom
Had alot of trouble getting on bottom

DRILLER Ol Kels Tom HELPER Sterry & Rouis
MACHINE NO. _____ FOREMAN _____

BOYLES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-12-74

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 6 _____
MIXING MUD _____

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

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE _____ OVERSIZE _____ ON _____ OFF 20
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) None rig in

DRILLER Al Nelson HELPER John
MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFOYD DATE 11-13-74
SHIFT DAY L 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 _____

^{195X}
MUD mud 2. 100.
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 4 loads

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 10 _____
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) rig up + haul water to fill pits

DRILLER Al Behr HELPER Jahn + Tom
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-14-74
 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 _____

#2 208K
 MUD ~~DREXCOE~~ - 1 SACK
 TYPE _____
~~SOVA PA~~ - 1 SACK
 GAL SEAL _____
 CAUSTIC - 1 SACK
 LUMINITE _____
 PORTLAND _____
 ADDITIVES _____
 WATER _____

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

TIME CHARGES

DRILLING _____	CEMENTING _____
REAMING _____	EQUIP. REPAIR _____
CASING _____	STAND-BY OR SURVEY <u>10</u>
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) haul water & mix mud, lower in pipe.

DRILLER John Al & Tom HELPER Louis Romero
 MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-15-74
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 #2 - 2 SACKS
MUDFILL - 3 SACKS
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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 10
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 10 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) lower in rods & haul water & mix mud

DRILLER John Bergsted HELPER Louis
MACHINE NO. 7 FOREMAN _____

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-15-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. _____

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 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY 8
SET-UP, TEAR DOWN _____ 8 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) clean out hole to 1475' full rods

DRILLER Tom Borgstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. Safford DATE 11-18-74
SHIFT DAY _____ SWING _____ NITE _____ HOLE NO. ES 31

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 105X mud 2
TYPE _____
CAL-SEAL 3 5 gal Can Form
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER 1 leaf

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

TIME CHARGES

Hourly DRILLING 8 CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ WASHING OR CLEANING _____

New Bit BITS AND SHELLS 5 7/8

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

REMARKS (Explain delays and hole condition) Washing down
Ball zone at 1535 to 1560

DRILLER Al Hehr HELPER Louis Romero
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY
SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-18-74
SHIFT DAY _____ SWING NITE _____ HOLE NO. ES-31

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 1 SACK
FORMALDEHYDE - 5 gal
~~TYPE~~ _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

HOPELY
DRILLING 8 _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD 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) washing down to 1600 lot of fill.

DRILLER John Borgstool HELPER Frank Byrson
MACHINE NO. _____ SS # 231-66-3010
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. Sufford DATE 11-18-79
SHIFT DAY _____ SWING _____ NITE L HOLE NO. ES-31

RODS, END OF SHIFT _____ MUD 5 mud # 2
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

Hourly 8
DRILLING _____ CEMENTING _____
REAMING _____ EQUIP. REPAIR _____
CASING 8 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) wash down to 1790' lots of fill

DRILLER Tom Bergstadt HELPER Sterling
MACHINE NO. _____ FOREMAN _____
7

BOYES BROS. DRILLING COMPANY

SHIFT REPORT

JOB 6-704 LOC. SAFFORD DATE 11-19-74
~~ES 31~~
SHIFT DAY SWING _____ NITE _____ HOLE NO. ES 31

RODS, END OF SHIFT _____
STICKUP, END OF SHIFT _____
DEPTH, END OF SHIFT 1835
DEPTH, START OF SHIFT 1800
DRILLED 35
CORE RECOVERED _____
TYPE OF ROCK _____
NUMBER OF RUNS _____

~~MUD~~ DISPERSE - 1 SACK
TYPE _____
CAL-SEAL _____
LUMNITE _____
PORTLAND _____
ADDITIVES _____
WATER _____

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

TIME CHARGES

DRILLING 50 _____ HOURLY CEMENTING 70 _____
REAMING _____ EQUIP. REPAIR _____
CASING _____ STAND-BY OR SURVEY _____
SET-UP, TEAR DOWN _____ WATER DELAY _____
MIXING MUD _____ 12 WASHING OR CLEANING _____

BITS AND SHELLS

BIT NO. _____ SIZE & TYPE 5/8 R.B. OVERSIZE _____ ON _____ OFF _____
SHELL NO. _____ TYPE _____ ON _____ OFF _____
BIT CONDITION _____ REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) clean out hole to bottom, trip rods out & add collars trip rods in & start drilling

DRILLER John Bergstad 12hrs HELPER Louis Eric Frenkel
MACHINE NO. _____ FOREMAN _____

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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: BOYLES CO

Telex: 388-321

Mr. Paul Eimon

Essex International, Inc.

1704 W. Grant Avenue

Tucson, Arizona 85705

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

INVOICE DATE: **November 30, 1974**

ORDER NUMBER:

INVOICE NUMBER: **SW-251**

CONTRACT: **6-704**

TERMS: **Net 30 Days**

LOCATION: **North of Safford, Arizona**

Hole No.		From	To	Footage	Rate	Total
ES-31	RB	1800	2000	200	9.25	1,850.00
	RB	2000	2105	105	11.25	1,181.25
Rig up, wash down to 1,800 ft., & mix mud				77 Hrs.	35.00	2,695.00
Lay down & haul casing				18 Hrs.	35.00	630.00
Setup coring & run in core pipe & haul water				20 Hrs.	35.00	700.00
Standby				2 Hrs.	35.00	70.00
Materials Used:	Caustic Soda (Baroid)			3 Sks.	22.49	67.47
	Mud No. 2			97 Sks.	3.90	378.30
	Driscose			3 Sks.	99.40	298.20
	Mud Fiber (Magcohar)			3 Sks.	15.40	46.20
	Disperse			2 Sks.	21.70	48.40

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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: BOYLES CO

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PAGE -3-

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total	
ES-31	NX	2105	2158	53	13.90	736.70
Mobilization to Safford					500.00	500.00
TOTAL BILLING						18,802.34

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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: BOYLES CO

Telex: 388-321

Mr. Paul Eimon

Essex International, Inc.

1704 W. Grant Avenue

Tucson, Arizona 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
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PAGE -2-

INVOICE DATE: November 30, 1974
 ORDER NUMBER:
 INVOICE NUMBER: SW-251
 CONTRACT: 6-704
 TERMS: Net 30 Days
 LOCATION: North of Safford, Arizona

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Formaldehyde		20 Gal.	35.00	700.00
	Miracle Lime (Baroid)		1 Sk.	3.81	3.81
	Portland Cement		20 Sk.	2.65	53.00
Mixing, handling, & Transportation			15 %	1,595.38	239.31
	Water		22 Loads	.75	16.50
	Rock Bit - 5 7/8		1	142.00	142.00
	3 1/2 Casing Black		2105 Ft.	3.80	7,999.00
	3 1/2 Casing Shoe Float		1	55.00	55.00
	4" Plug		1	13.00	13.00
Water Truck Rental - 390.00 Per Mo.			18 Days	13.00	234.00
Water Truck Mileage			484 Mi.	.30	145.20

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 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: BOYLES CO

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BRANCH OFFICES

PHOENIX, ARIZONA

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SPOKANE, WASHINGTON

MURFREESBORO, TENNESSEE

IRONWOOD, MICHIGAN

SANTIAGO, CHILE

cable: BOYLESBROS

LIMA, PERU

cable: BOYLES CO

MEXICO CITY, MEXICO

telex: 001774546

*Essex International Inc.
 1704 W. Grant Ave.
 Tucson Ariz 85705*

Web Essex

INVOICE DATE: *12-24-74*
 ORDER NUMBER:
 INVOICE NUMBER:
 CONTRACT: *6-704*
 TERMS: *30 days*
 LOCATION: *NO of SAFFORD*

Hole No.	From	To	Footage	Rate	Total
<i>ES-31</i>	<i>2158</i>	<i>2500</i>	<i>362</i>	<i>13.90</i>	<i>4753.80</i> <i>1894.20</i>
	<i>2500</i>	<i>2623</i>	<i>123</i>	<i>15.40</i>	<i>1894.20</i>
	<i>935X</i>	<i>mud 2</i>		<i>3.90</i>	<i>362.70</i>
	<i>6 SX</i>	<i>Driscol</i>		<i>99.40</i>	<i>596.40</i>
	<i>3 SX</i>	<i>Caustic Soda</i>		<i>18.15</i>	<i>54.45</i>
	<i>7</i> <i>10 SX</i>	<i>Soda ash</i>		<i>14.50</i>	<i>101.50</i>
	<i>11 SX</i>	<i>Grub Seal</i>		<i>15.40</i>	<i>169.40</i>
	<i>12 SX</i>	<i>Dicks mud Seal</i>		<i>10.55</i>	<i>126.60</i>
	<i>3 SX</i>	<i>Barite</i>			
	<i>1 SX</i>	<i>mud fiber</i>			
	<i>1 SX</i>	<i>Asbestos</i>			

DIAMOND CORE DRILLING
 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: BOYLES CO

Telex: 388-321

BRANCH OFFICES

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

INVOICE DATE: 12-24-74
 ORDER NUMBER:
 INVOICE NUMBER:
 CONTRACT: 6-704
 TERMS: 30 days
 LOCATION: 70 of Safford

Essex International Inc
 1704 W. Grant Ave.
 Tucson Ariz 85705

Web Essex

Hole No.	From	To	Footage	Rate	Total
ES = 31	1 SX	Seegel		8.68	8.68
	1 SX	Lime			
	1 SX	Wall nut med.		11.12	11.12
	27 SX	Portland Cement		2.65	71.55
		95 hrs Cement + drilling time + Standby		35.00	3325.00
		24 day water truck Rental 390.00		13.00 da.	312.00
		744 miles road water truck mileage		30/mile	223.20
		31 loads water at		.75	23.25

DIAMOND CORE DRILLING
 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: BOYLES CO

Telex: 388-321

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
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 MURFREESBORO, TENNESSEE
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 SANTIAGO, CHILE
 cable: BOYLESBROS
 LIMA, PERU
 cable: BOYLES CO
 MEXICO CITY, MEXICO
 telex: 001774546

INVOICE DATE: 11-30-74
 ORDER NUMBER:
 INVOICE NUMBER:
 CONTRACT: 6-704
 TERMS: 30 day
 LOCATION: No. of Safford

Esser International Inc
 1704 W. Grant Ave
 Tucson Ariz 85705

WGB
 Esser

Hole No.	From	To	Footage	Rate	Total
ES 31	20	gals Formidolhyde			
	1	5 7/8 Rock Bit		142.	142.00
	2105 ft	3 1/2 Casing Black.			
	1	Casing shoe.			55.00
	1	Miracle Lino			
	1	4 in plug		1300	13,00
	20	5x cement Portland			
		Mobilization to Safford.			500.00
	2105 ft	2158 ft.	53	13.90	736.70
	Water tub	WT rental		390.00	234.00
	Water tub	Mileage 484 mi.		30 mile	145.20

DIAMOND CORE DRILLING
 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: BOYLES CO

Telex: 388-321

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 telex: 001774546

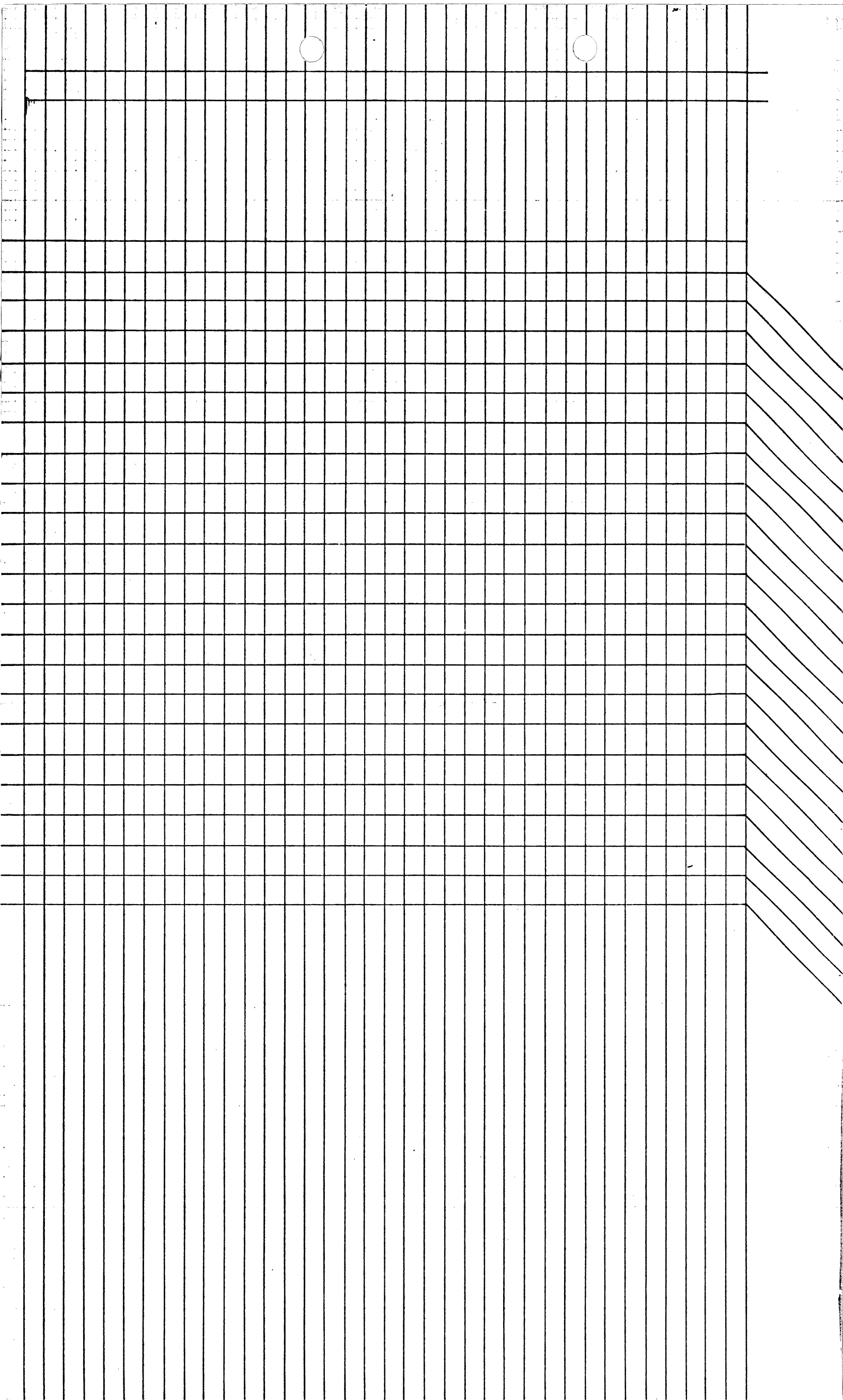
INVOICE DATE:
 ORDER NUMBER:
 INVOICE NUMBER:
 CONTRACT:
 TERMS:
 LOCATION:

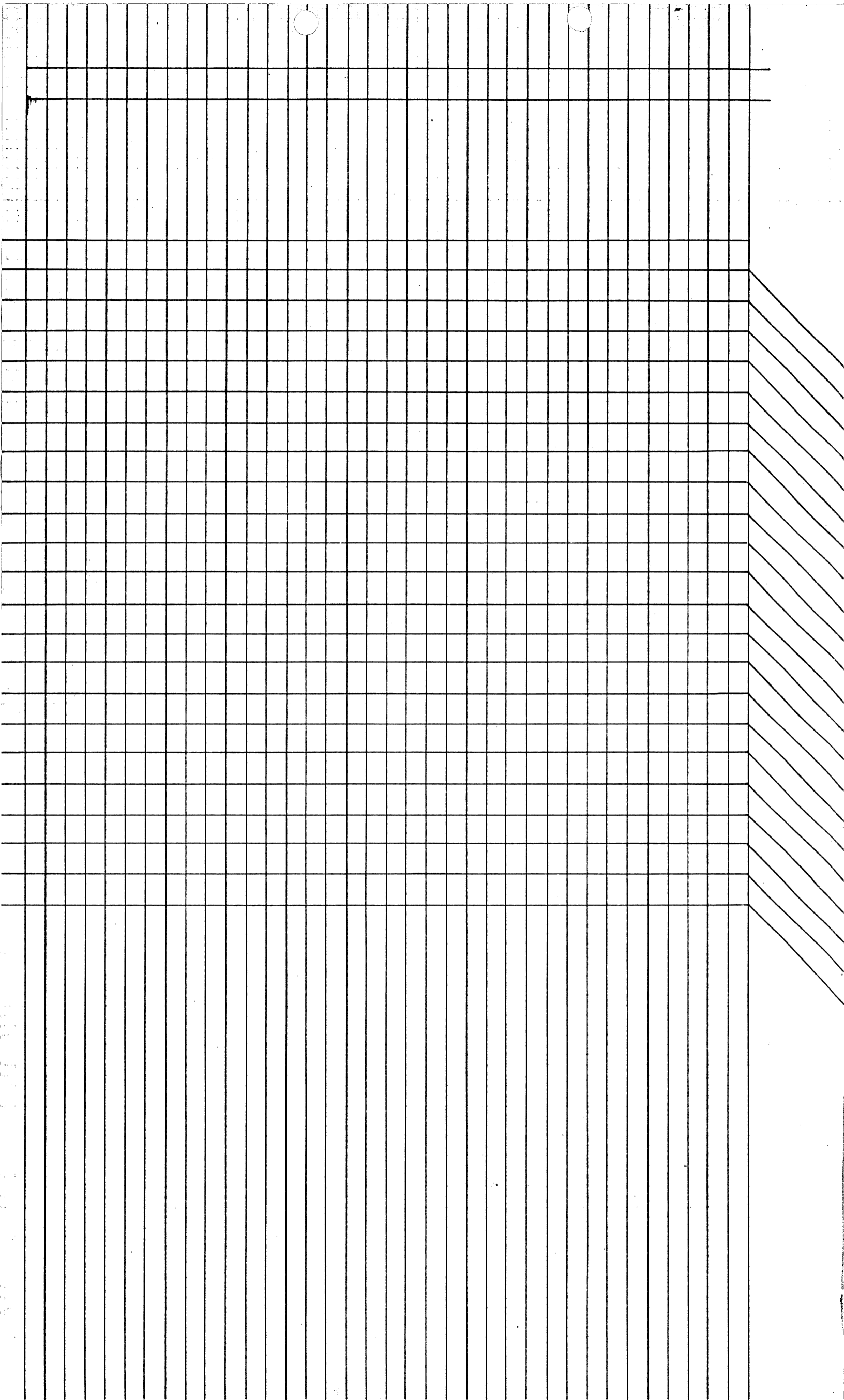
11-30-74
6-704
30 days
No. of Safford.

Essex International Inc
1704 W. Grant Ave.
Tucson Ariz 85705

Web Essex

Hole No.	From	To	Footage	Rate	Total
1800	1800	2000	200	9.25	1850.00
ES 31	2000	2105	105	11.25	1181.25
77 hrs	rig up + wash down to 1800 ft. + mix mud			35.00	2695.00
18 hrs	Lay down + Haul casing			35.00	630.00
20	Setup casing & run in core pipe + haul water			35.	700.00
2	Pump Standby			35	70.00
35	Caustic Soda				
97	5X Mud 2	22	load water	.75	16.50
3	5X Driscoll Driscoll				
3	5X mud filter				
2	5X Despersants				





FROM THE DESK OF:

E. Grover Heinrichs

Hold this

Send to Mr. Wayne

JAN.

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2614-2619

ASSAYS

Cu

Nº 00352

ESSEX INTERNATIONAL

Date _____

ASSAYS

Nº 00352

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2385 - 2390

ASSAYS

CO, Au

Nº 00353

ESSEX INTERNATIONAL

Date _____

ASSAYS

Nº 00353

ESSEX INTERNATIONAL

Date _____

LOCATION ES-31

DESCRIPTION

2609-2614

ASSAYS

CU

Nº 00351

ESSEX INTERNATIONAL

Date _____

ASSAYS

Nº 00351

(Placer claim) Watson Wash #1 - 32 (214-234)
Doc page

Beginning NW cor of the E/2, SE/4,
SW/4 of Sec 4 T.6 R.26E (LOC 12/27/73)

NW cor then south 1320' to

the SW COR then East 660' to the

SE COR then N 1320' to the

NE cor then W 660' to the beginning

Producers Mineral Moon #10
Doc Page 228 - 375 11/19/74 100' from the

East Center end of 1400 from the west
end of claim - SE to NW direction.

3928.4 in a N 58° 35' E direction

from the S/4 Corner Sec 2 T.6-S

R-26E - more exact direction is N 75° 45' W
1500', S 14° 55' 600', S 75° 45' E 1500' &

N 14° 55' E to point of beginning -

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

BRANCH OFFICES
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 MEXICO CITY, MEXICO
 telex: OO1774546

CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLES CO

Telex: 388-321

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

INVOICE DATE: **December 24, 1974**

ORDER NUMBER:

INVOICE NUMBER: **SW-279**

CONTRACT: **6-704**

TERMS: **Net 30 Days**

LOCATION: **N. of Safford, Arizona**

Hole No.	From	To	Footage	Rate	Total
ES-31	2158	2500	362	13.90	5,031.80
	2500	2623	123	15.40	1,894.20
Materials Used:	Mud No. 2		93 Sks.	3.90	362.70
	Driscoase		6 Sks.	99.40	596.40
	Caustic Soda		3 Sks.	18.15	54.45
	Soda Ash		7 Sks.	14.50	101.50
	Kwik Seal		11 Sks.	15.40	169.40
	Dicks Mud Seal		12 Sks.	10.55	126.60
	Barite (Baroid)		3 Sks.	5.20	15.60
	Mud Fiber (Magcohar)		1 Sk.	15.40	15.40
	Asbestos (Baroid)		1 Sk.	17.58	17.58

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

BRANCH OFFICES
 PHOENIX, ARIZONA
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 SPOKANE, WASHINGTON
 MURFREESBORO, TENNESSEE
 MT. IRON, MICHIGAN
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 telex: 001774546

CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLESOP

Telex: 388-321

PAGE -2-

INVOICE DATE: December 24, 1974
 ORDER NUMBER:
 INVOICE NUMBER: SW-279
 CONTRACT: 6-704
 TERMS: Net 30 Days
 LOCATION: N. of Safford, Arizona

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Zeogel (Baroid)		1 Sk.	8.68	8.68
	Line (Baroid)		1 Sk.	3.81	3.81
	Wall-mut - Medium (Baroid)		1 Sk.	11.12	11.12
	Portland Cement		27 Skts.	2.65	71.55
Mixing, handling, & transportation			15 %	1,554.79	233.22
Cement, drilling, & standby time			95 Hrs.	35.00	3,325.00
Water Truck Rental - 390.00 Per Mo.			24 Days	13.00	312.00
Water Truck Mileage			744 Mi.	.30	223.20
Loads of Water			31 Loads	.75	23.25
			TOTAL BILLING		12,597.46

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

BRANCH OFFICES
 PHOENIX, ARIZONA
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CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLESOP

Telex: 388-321

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

INVOICE DATE: **December 24, 1974**

ORDER NUMBER:

INVOICE NUMBER: **SW-279**

CONTRACT: **6-704**

TERMS: **Net 30 Days**

LOCATION: **N. of Safford, Arizona**

Hole No.	From	To	Footage	Rate	Total
ES-31	2158	2500	362	13.90	5,031.80
	2500	2623	123	15.40	1,894.20
Materials Used:	Mud No. 2		93 Sks.	3.90	362.70
	Driscoase		6 Sks.	99.40	596.40
	Caustic Soda		3 Sks.	18.15	54.45
	Soda Ash		7 Sks.	14.50	101.50
	Kwik Seal		11 Sks.	15.40	169.40
	Dicks Mud Seal		12 Sks.	10.55	126.60
	Barite (Baroid)		3 Sks.	5.20	15.60
	Mud Fiber (Magcobar)		1 Sk.	15.40	15.40
Asbestos (Baroid)		1 Sk.	17.58	17.58	

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

BRANCH OFFICES
 PHOENIX, ARIZONA
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 MURFREESBORO, TENNESSEE
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CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671

SALT LAKE CITY, UTAH 84110

Cable: BOYLES CO

Telex: 388-321

PAGE -2-

INVOICE DATE: **December 24, 1974**
 ORDER NUMBER:
 INVOICE NUMBER: **SW-279**
 CONTRACT: **6-704**
 TERMS: **Net 30 Days**
 LOCATION: **N. of Safford, Arizona**

Mr. Paul Eimon
Essex International, Inc.
1704 W. Grant Avenue
Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Zeogel (Baroid)		1 Sk.	8.68	8.68
	Lime (Baroid)		1 Sk.	3.81	3.81
	Wall-nut - Medium (Baroid)		1 Sk.	11.12	11.12
	Portland Cement		27 Sks.	2.65	71.55
Mixing, handling, & transportation			15 %	1,554.79	233.22
Cement, drilling, & standby time			95 Hrs.	35.00	3,325.00
Water Truck Rental - 390.00 Per No.			24 Days	13.00	312.00
Water Truck Mileage			744 Mi.	.30	223.20
Loads of Water			31 Loads	.75	23.25
			TOTAL BILLING		12,597.46

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 PRIMARY 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: BOYLES CO

Telex: 388-321

MR PAUL EIMON

Essey International Inc
 1704 W. Grant Ave
 Tucson Ariz 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
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INVOICE DATE: 12-24-74
 ORDER NUMBER:
 INVOICE NUMBER: SW-279
 CONTRACT: 6-704
 TERMS: 30 days
 LOCATION: NO of Safford

W6B
 Essey

Hole No.	From	To	Footage	Rate	Total
ES-31	2158	2500	362	13.90	5031.80
	2500	2623	123	15.40	4753.00 1894.20
	935X	mud 2		3.98	362.70
	6 SX	Driscoll		99.40	596.40
	3 SX	Caustic Soda		18.15	54.45
	7 SX	Soda ash		14.50	101.50
	11 SX	Keit Seal		15.40	169.40
	12 SX	Dicks mud Seal		10.55	126.60
	3 SX	Barite		5.20	15.60
	1 SX	mud fiber (M)		15.40	15.40
1 SX	Asbestos		17.58	17.58	

W6B
 Essey

DIAMOND CORE DRILLING
 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: BOYLES
 Telex: 388-321

MR. PAUL EIMON

*Essex International Inc
 1704 W. Grant Ave.
 Tucson Ariz 85705*

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
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 cable: BOYLESBROS
 MEXICO CITY, MEXICO
 telex: 001774546

PAGE - 2 -

INVOICE DATE: *12-24-74*
 ORDER NUMBER:
 INVOICE NUMBER: *SW-279*
 CONTRACT: *6-704*
 TERMS: *30 days*
 LOCATION: *no of Safford*

*W6B
 Essex*

Hole No.	From	to	Footage	Rate	Total
ES = 31	1 SX	3eaget		8.68	8.68
	1 SX	Lime		3.81	3.81
	1 SX	Wall nut med.		11.12	11.12
	27 SX	Portland Cement		2.65	71.55
	95 hrs cement + drilling time + Standby			35.00	3325.00
	24 day water truck Rental 390 mo.			13.00 da.	312.00
	744 miles 3 loads Water Truck Mileage			30 A mile	223.20
	31 loads Water at			75	23.25
	Mining, Handling, & Transportation		15%	1554.79	233.22
					12597.46

DIAMOND CORE DRILLING
 REFRARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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: BOYLES CO

Telex: 388-321

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
 SPOKANE, WASHINGTON
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 SANTIAGO, CHILE
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 MEXICO CITY, MEXICO
 telex: 001774546

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Hole No.	From	To	Footage	Rate	Total
ES-31 RB	1800	2000	200	9.25	1,850.00
RB	2000	2105	105	11.25	1,181.25
Rig up, wash down to 1,800 ft., & mix mud			77 Hrs.	35.00	2,695.00
Lay down & haul casing			18 Hrs.	35.00	630.00
Setup coring & run in core pipe & haul water			20 Hrs.	35.00	700.00
Standby			2 Hrs.	35.00	70.00
Materials Used:	Caustic Soda (Baroid)		3 Sk.	22.49	67.47
	Mud No. 2		97 Sk.	3.90	378.30
	Driscose		3 Sk.	99.40	298.20
	Mud Fiber (Magcobar)		3 Sk.	15.40	46.20
	Disperse		2 Sk.	21.70	48.40

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
 GOLDEN, COLORADO
 SPARKS, NEVADA
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PAGE -2-

INVOICE DATE: November 30, 1974
 ORDER NUMBER:
 INVOICE NUMBER: SW-251
 CONTRACT: 6-704
 TERMS: Net 30 Days
 LOCATION: North of Safford, Arizona

Hole No.	From	To	Footage	Rate	Total
Materials Used:	Formaldehyde		20 Gal.	35.00	700.00
	Miracle Lime (Baroid)		1 Sk.	3.81	3.81
	Portland Cement		20 Sk.	2.65	53.00
Mixing, handling, & Transportation			15 %	1,595.38	239.31
	Water		22 Loads	.75	16.50
	Rock Bit - 5 7/8		1	142.00	142.00
	3½ Casing Black		2105 Ft.	3.80	7,999.00
	3½ Casing Shoe Float		1	55.00	55.00
	4" Plug		1	13.00	13.00
Water Truck Rental - 390.00 Per Mo.			18 Days	13.00	234.00
Water Truck Mileage			484 Mi.	.30	145.20

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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: BOYLES CO

Telex: 388-321

Mr. Paul Eimon
 Essex International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

BRANCH OFFICES
 PHOENIX, ARIZONA
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PAGE -3-

INVOICE DATE: November 30, 1974

ORDER NUMBER:

INVOICE NUMBER: SW-251

CONTRACT: 6-704

TERMS: Net 30 Days

LOCATION: North of Safford, Arizona

Hole No.		From	To	Footage	Rate	Total
ES-31	NX	2105	2158	53	13.90	736.70
Mobilization to Safford					500.00	500.00
TOTAL BILLING						18,802.34

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

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

INVOICE DATE: **January 7, 1975**

ORDER NUMBER:

SW-296

INVOICE NUMBER:

6-704

CONTRACT:

Net 30 Days

TERMS:

LOCATION:

North of Safford, Arizona

Mr. Paul Eimon

ESSEX International, Inc.

1704 W. Grant Avenue

Tucson, Arizona 85705

Hole No.	From	To	Footage	Rate	Total
ES-31	2623	2745	122	15.40	1,878.80
Materials Used:	Rod Lube (Magcobar)		5 Cans	20.10	100.50
	Spersene (Magcobar)		2 Skis.	21.94	43.88
	Formaldehyde		1 Sk.	35.00	35.00
	DEET-585		1 Can	33.10	33.10
Freight & Handling			15 %	212.48	31.87
Water Truck Rental - 390.00 Per Mo.			7 Days	13.00	91.00
Water Truck Mileage			24 Mi.	.30	7.20
			TOTAL BILLING		2,221.35
FINAL INVOICE ES-31					

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

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

CONTRACTORS-ENGINEERS

General Offices and Plant

1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
 SALT LAKE CITY, UTAH 84110

Cable: BOYLESBROS

Telex: 388-321

INVOICE DATE: 1-7-75

ORDER NUMBER:

INVOICE NUMBER: SW-296

CONTRACT: 6-704

TERMS: NET 30 da.

LOCATION: No. Safford

*Essex International Inc.
 1704 W. Grant Ave.
 Tucson, Ariz. 85705*

Account W6B

Hole No.	From	To	Footage	Rate	Total
ES-31	2623	2745	122.	15.40	1878.80
	Scan's Rod Lule (M)			20.10	100.50
	2 SX. Sperson (M)			21.94	43.88
	1 Formaldhyde			35.00	35.00
	1 can. Det 585			33.10	33.10
	7 day water rental		390. mo.	13.00 a. da.	91.00
	24 miles water to mileage			.30	7.20
	10 hrs rigging down			35.00	350.00
	15% of materials used			212.48	31.87
	FINAL INVOICE ES-31				2221.35
	TOTAL				1997.00

DIAMOND CORE DRILLING
 ROTARY DRILLING
 GROUTING
 FOUNDATION TESTING
 DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

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

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

Mr. Paul Eimon
 ESSEX International, Inc.
 1704 W. Grant Avenue
 Tucson, Arizona 85705

INVOICE DATE: **January 7, 1975**
 ORDER NUMBER:
 INVOICE NUMBER: **SW-296**
 CONTRACT: **6-704**
 TERMS: **Net 30 Days**
 LOCATION: **North of Safford, Arizona**

Hole No.	From	To	Footage	Rate	Total
ES-31	2623	2745	122	15.40	1,878.80
Materials Used:	Rod Lube (Magobar)		5 Cans	20.10	100.50
	Spersene (Magobar)		2 Sks.	21.94	43.88
	Formaldehyde		1 Sk.	35.00	35.00
	DET-585		1 Can	33.10	33.10
Freight & Handling			15 %	212.48	31.87
Water Truck Rental - 390.00 Per Mo.			7 Days	13.00	91.00
Water Truck Mileage			24 MI.	.30	7.20
			TOTAL BILLING		2,221.35
FINAL INVOICE ES-31					

Late Payment Charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

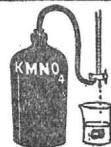
1435 S. 10th AVE.

P. O. BOX 1889

DUPLICATE

Jacobs Assay Office

Registered Assayers



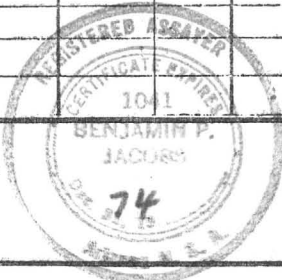
PHONE 622-0813

Certificate No. 59457

TUCSON, ARIZONA 85702 Dec 22nd 1974

Sample Submitted by Mr. Essay International, Inc

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
		\$					
# 00351	Trace			0.045			
352	0.002			0.035			
353	Trace			0.050			
<i>(Duplicate - I.A.T. Fore Assays made on above Gold assays.)</i>							



* Gold Figured \$85.00 per oz. Troy

Charges \$ 30.00

Very respectfully,

Ben P. Jacobs

DIAMOND CORE DRILLING
 ROYALTY 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: BOYLES CO

Telex: 388-321

MR. PAUL EIMON

Essex International Inc.
 1704 W. Grant Ave.
 Tucson ariz 85705

*Copy
 See attached
 Sheet*

BRANCH OFFICES

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

INVOICE DATE: *11-30-74*

ORDER NUMBER:

INVOICE NUMBER: *SW-25/1*

CONTRACT: *6-704*

TERMS: *30 days*

LOCATION: *No. of Safford, AZ*

*Web
 Essex*

Hole No.	From	To	Footage	Rate	Total
1800 RB	1800	2000	200	9.25	1850.00
ES 3 / RB	2000	2105	105	11.25	1181.25
77 his	rig up + washdown to 1800ft + mix mud			35.00	2695.00
18 his	Laydown + Haul casing			35.00	630.00
20	Setup casing + run in core pipe + Haul water			35.00	700.00
2	Pumps Standby			35.00	70.00
35	Caustic Soda (B)			22.49	67.47
97 SX	Mud 2		22 loads water	753.90	16378.30
3	SX Driscoll			99.40	298.20
3	SX mud filter (M)			15.40	46.20
2	SX Despersen			21.70	48.40
	WATER		22 LOADS	.75	16.50

DIAMOND CORE DRILLING
 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: BOYLESKO

Telex: 388-321

MR. PAUL EIMON

Essex International Inc

1704 W. Grant Ave

Tucson Ariz 85705

BRANCH OFFICES

PHOENIX, ARIZONA

GOLDEN, COLORADO

SPARKS, NEVADA

SPOKANE, WASHINGTON

MURFREESBORO, TENNESSEE

IRONWOOD, MICHIGAN

SANTIAGO, CHILE

cable: BOYLESBROS

LIMA, PERU

cable: BOYLESKO

MEXICO CITY, MEXICO

telex: 001774546

INVOICE DATE:

11-30-74

ORDER NUMBER:

INVOICE NUMBER:

5W-251

CONTRACT:

6-704

TERMS:

30 day

LOCATION:

no of Safford, AZ

WGB
 Casey

Hole No.	From	To	Footage	Rate	Total
ES 31	20	gal's Formdehyde		35.00	200.00
	1	5 7/8 Rock Bit		142.00	142.00
	2105 ft	3 1/2 Casing Black		3.80	7,999.00
	1	Casing Shoe 3 1/2 Float			55.00
	1	miracle Lino (B)		3.81	3.81
	1	4 in plug		1300	13,00
	20	5x cement Portland		2.65	53.00
		Mobilization to Safford		500.00	500.00
NX	2105 ft	2158 ft.	53	13.90	736.70
	Water tub	WT rental - 390.00 PER Mo.	18 DAYS	13.00	234.00
	Water tub	Mileage 484 mi.		30 miles	145.20

9. MIXING, HANDLING & TRANSPORTATION 15% 1595.38 239.31

18,802.34

1435 S. 10th AVE.

P. O. BOX 1889

Jacobs Assay Office

Registered Assayers



PHONE 622-0813

Certificate No. 59441

TUCSON, ARIZONA 85702

Nov 26

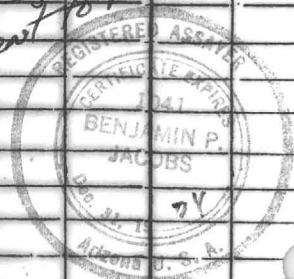
1974

Sample Submitted by Mr. Essex International, Inc.

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
01701	—			0.130			
2	—			0.135			
3	Trace			0.130			
4	—			0.135			
5	—			0.115			
6	0.002			0.110			
7	—			0.125			
8	—			0.140			
9	0.002			0.130			
01710	—			0.115			
11	—			0.120			
12	Trace			0.135			

*ES-31
SARVORD
Proj. 6 F/W
Sent to F/W*

SXM
NOV 27 1974
RECEIVED



(Includes - I.A.T. Fire assays made on above Gold assays)

* Gold Figured \$100.00 per oz. Troy

Charges \$ 48.00

Very respectfully,

Ben P. Jacobs

1435 S. 10th AVE.

P. O. BOX 1889

Jacobs Assay Office

Registered Assayers



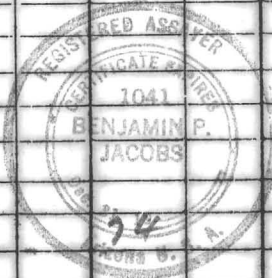
PHONE 622-0813

Certificate No. 59451

TUCSON, ARIZONA 85702

Dec 10 1974

Sample Submitted by Mr. Essex International Inc

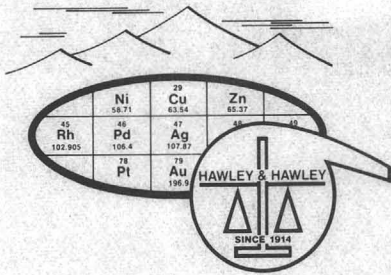
SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
<u>01713</u>		\$		<u>003</u>			
<u>14</u>				<u>002</u>			
							
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> PROJECT NO. _____ BUDGET NO. <u>855919</u> APPROVED BY _____ DATE _____ FOR _____ PAYMENT OF \$ <u>4.00</u> ONLY </div>							

* Gold Figured \$100.00 per oz. Troy

Charges \$ 4.00

Very respectfully,

Ben P. Jacobs



SKYLINE LABS, INC.

Hawley & Hawley, Assayers and Chemists Division
 P.O. Box 50106 • 1700 West Grant Road
 Tucson, Arizona 85703
 (602) 622-4836

INVOICE

SOLD TO: Essex International, Inc.
 1704 West Grant Road
 Tucson, Arizona 85705

INVOICE NO.:
 JOB NO.: 750026
 P.O. NO.:

DATE: January 14, 1975

Attention: Mr. E. G. Heinrichs

TERMS: NET 30 DAYS

Analysis of 3 Rock Chip Samples

Single analysis

3 Gold (fire assay) @ \$4.00.....	\$12.00
3 Copper @ \$2.00.....	6.00
	<hr/>
Sub Total	18.00
3 Samples crushed, split and pulverized @ \$1.65.....	4.95
(sample wt 6 lbs: 1st lb @ \$0.90, >1 lb add \$0.15/lb)	<hr/>
Total	\$22.95

STRATHMORE ONION SKIN
 25% COTTON FIBER USA



THE
HILTON
INN

Hole ES-31

2500

400'

STRONG Py - Biotite
INCREASING Chalco

Pyrite zone

DRILL 1000' MORE

 We invite you to
THESE FINE HILTON INN FACILITIES

THE PENTHOUSE THE RIVER ROOM
THE CLIFF LOUNGE

Date Started ^{Dredging} Nov 19th

Date Commg Started Nov 29th

~~Footage at end of Nov 29th 2105'~~
(According to bill)

Actual 2118'
at end of Nov
not billed