OFFICE OF MINERALS EXPLORATION
CONTRACT EXAMINATION AND AUDIT DIVISION

MAR 19 1959
OME

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

San Mateo Dome Project
E. J. Longyear Company, Agent,
416 Colorado Building
Denver 2, Colorado,

pertaining to Exploration Project Contract No. Idm-E1183, DMEA No. 4842, including Amendment No. 1, for the months of June, 1958 to October, 1958, inclusive, covering a project for the exploration of uranium on property known as San Mateo Dome Project located in McKinley County, New Mexico.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$96,886.99
Exceptions: (Schedule attached)		
Prior to this review	$0.81	
Less: Reinstatement by review	0.00	
Herewith	0.00	0.81
Total Accepted Cost		$96,886.18

The contract calls for the following percentages of participation of exploration expenses by the United States Government:

	Accepted Costs	Percentage Participation	Amt. of Gov't. Participation
Stage I	$59,403.25	75%	$44,552.44
Stage III	37,482.93	50%	18,741.47
	$96,886.18		$63,293.91

Therefore, payment to the contractor by the Government in the amount Sixty-Three Thousand, Two Hundred Ninety-Three and 91/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Director, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$63,293
Amount reimbursed	62,7
Balance due Operator	$

March 13, 1959

Donald F. [illegible]

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

SAN MATEO DOME PROJECT

Contract Idm-E1183 Docket No. DMEA 4842

(a) The monthly reports were supported by documentary proof of that portion ($88,730.87) of the costs which covered work performed at unit rates under independent contract, and that portion ($82.13) which covered other costs for contribution by the Government on the basis of actual costs (per summary attached).

(b) The balance ($8,073.18) of the costs incurred were under contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

(c) The administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible further cost disallowances thereunder.

SCHEDULE OF EXCEPTIONS

SAN MATEO DOME PROJECT

Contract Idm-E1183 Docket No. DMEA 4842

Prior Disallowance by Field Team

7 feet of logging and probing at $0.1157/foot which was in excess of actual drilling	$ 0.81

SUMMARY OF DOCUMENTED COSTS

SAN MATEO DOME PROJECT

Contract Idm-E1183 | Docket No. DMEA 4842

	Stage I Gov. Part. 75%	Stage III Gov. Part. 50%	Total
Independent Contracts			
Bulldozing			
38 hours at $15.00/hr.	$ 570.00		
12 hours at $15.00/hr.		$ 180.00	$ 750.00
Non-core Drilling			
19,500 ft. at $1.50/ft.	29,250.00		
13,500 ft. at $1.50/ft.		20,250.00	49,500.00
6,170 ft. at $2.25/ft.	13,882.50		
5,090 ft.at $2.25/ft.		11,452.50	25,335.00
Core Drilling			
591 ft. at $13.00/ft.	7,683.00		7,683.00
Logging and Probing			
26,261 ft. at $0.11264/ft.	2,958.14		
18,590 ft. at $0.11002/ft.		2,045.23	5,003.37
Standby Time			
Drill Crew			
5½ hrs. at $15.00/hr.	82.50		
9 hrs. at $15.00/hr.		135.00	217.50
Logging and Probing Crew			
8.6 hrs. at $10.00/hr.	86.00		
7.4 hrs. at $10.00/hr.		74.00	160.00
Circulation Material in excess $100.00 per hole	82.00		82.00
Total Independent Contracts	$54,594.14	$34,136.73	$88,730.87
Miscellaneous			
70 Cardboard Core boxes at $1.1733/each	82.13		82.13
Total Documented Costs	$54,676.27	$34,136.73	$88,813.00
Fixed Unit Costs			
Incidental Allowance			
26,261 ft. completed drilling at $0.18/ft.	4,726.98		
18,590 ft. completed drilling at $0.18/ft.		3,346.20	8,073.18
Total Accepted Costs	$59,403.25	$37,482.93	$96,886.18

MAR 19 1959

Memorandum

To: Donald T. Finch, OGC Auditor

From: Jay L. Chambers (Signed) J. L. Chambers
Contract Administration and Audit Division

Subject: Docket No. [illegible] (Remand)
E. F. Longyear Company, Agent
Contract No. [illegible]

Your Report of Review on the above referenced contract for acceptable and general distribution is enclosed.

GHCarty/GHoC
March 19, 1959

cc: Docket
Director's Reading File
Mr. Chambers

Bldg. New Customhouse
Denver 2, Colorado
March 12, 1959

800

Memorandum

To: Donald T. Finch, GMK Auditor

From: Executive Officer, GMK Field Team, Region III

Subject: Docket No. RMEA 4542 (Uranium) Contract IGm-[illegible]
R. J. Longyear Company, Agent (San Mateo Dome Project)
McKinley County, New Mexico

The subject contract was considered completed on completion of the authorized work under primary Stages I and III, and the Operator was so notified by our letter of February 19, 1959, a copy of which is enclosed for your records, together with a copy of the Operator's letter of February 17, 1959, requesting termination.

The Operator has rendered its final report as required by the contract, therefore, final payment of the Operator's account is in order, contingent on release to this office of a Certificate and Report of Audit, or Report of Review, or reported project costs, whichever the case indicates.

Work or service completed on a fixed unit cost basis consisted of Incidental Allowance for 44,851 feet of drilling.

The sum of $500.00 was withheld from reimbursement to the Operator in processing its final accounting report, which was for the month of October, 1958.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosure

JWT:bmh

cc: Chem. Op. Comm. (2)
Kornhauser
Rosario, GMK/Tuc.
Emerick
Corres.file, Reg. III
Cooper
Chron

25A New Customhouse
Denver 2, Colorado
March 25, 1959

Memorandum

To: F. A. Christensen

From: Executive Officer, OME Field Team, Region III

Subject: Denied No. MMA 4Ah2 (Uranium) Contract Ln-X1183,
E. J. Longyear Company, Agent, (San Mateo Base Project)
McKinley County, New Mexico - FINAL PAYMENT

Reference is made to our memorandum of November 25, 1958, whereby we forwarded the final Form MF-10A, Operator's Monthly Report and Voucher, for October 1958, and requested that you withhold an amount of $500.00 from reimbursement to the Operator, pending resolution of matters prerequisite to closing the account.

The Operator's final report has been received, therefore final payment to the Operator is to be made on the following basis, which is in conformance with the Report of Review of reported project costs, by the Contract Administration and Audit Division, OME, dated March 13, 1959.

Basis for Final Payment

Total accepted cost		$96,886.18
Government contribution provided by Contract:		
Stage I, 75% of $59,403.25	$44,552.44	
Stage II, 50% of $37,482.93	18,741.47	
Total Government contribution		$63,293.91
Total prior payments		62,793.91
Balance due the Operator		$ 500.00

Original signed by
J. W. TOWNSEND
J. W. Townsend

JWCtmh

cc: Chief, Op. Comm. (2)
Hardman
Hamrick
Remele, OME/Wac.
MF-10A file, Reg. III
Corres. file, Reg. III
Shoper
Crews

$500.00

3/25/59 OME-59-98

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED 1 1958 O.M.E.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 1958 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ [illegible] Government Participation: 75% Amount, $ [illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	[illegible]	[illegible]	[illegible]			
Bulldozing	[illegible]	[illegible]	[illegible]			
[illegible]	—	[illegible]	[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]			
(2) [illegible]	[illegible]	[illegible]	[illegible]			
Labor	[illegible]	[illegible]	[illegible]			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
[illegible]	—	[illegible]	[illegible]			
(8) Contingencies (specify):						
					76199.29	96,886.18
TOTALS	[illegible]	[illegible]	[illegible]	20686.89	76200.10	96886.99

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

Date [illegible] *Payee [illegible]

Per [illegible] Title Project Engineer

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

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

$ *500.00

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

* $ 9,843.45

Signature [illegible]
(Authorized Certifying Officer)

Date 11-26-58 Vou. No. DMEA-58-65

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IAm-E1183 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date Nov. 18, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Checked Engineering Feasibility

Signature [illegible] Title Executive Officer Date NOV 24 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A.
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED DEC 1 1958 O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Crosscutting	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Raising	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shafts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Winzes	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Drilling: Core	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Churn	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Auger	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Stripping	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Trenching	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Test Pits	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Roads and Trails	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL DISTRIBUTED COSTS				[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS				[illegible]				[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date [illegible] Operator [illegible]

Per B. Hoenson Title [illegible]

[illegible]

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

T. M. Donnelly

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

RECEIVED DEC 1 1958 O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name B. F. Goodrich Company, Atomic Energy Project Minerals [illegible]
Address [illegible], Grants, New Mexico

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting		[illegible]		[illegible]				
Crosscutting								
Raising								
Shafts: [illegible] Crew [illegible]	Hr.	7.50	0.5	135.00	9	15.00	9	15.00
Winzes: [illegible] Crew [illegible]	Hr.	67.00	6.7	75.00	6.3	10.00	9	10.00
Drilling: Core								
Core-Core [illegible] 0-1000	Foot	4,250.00	1,700	20,250.00	12,500	1.60	12,500	1.60
Core-Core [illegible] 1000-2000	Foot	6,222.50	2,110	12,100.50	5,500	2.25	5,500	2.25
Auger								
Surveying: Production Material		—	—	—	—	—	9	10.00
Trenching: Trenching	Foot	1,121.00	10,310	2,015.00	10,500	0.110	10,000	0.125
Test Pits								
Roads and Trails: Building	Hr.	60.00	6	300.00	12	15.00	12	15.00
[illegible] Maintenance	Foot	1,095.00	10,510	3,[illegible].00	10,500	0.10	10,000	0.10
TOTAL DISTRIBUTED COSTS		10,666.00		37,[illegible].00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10,666.00		37,[illegible].00				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 1, 1958 Operator B. F. Goodrich Company

Per B. F. Sorenson Title Project Engineer

B. F. Sorenson

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

M Romolo

INSTRUCTIONS

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In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXTRA COPY
O. M. E.
RECEIVED DEC 1 1958

DATE	INITIALS	UCODE
		200

FINAL DISTRIBUTION
MADE NOV 28 1958

DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

Administrative Audit Difference Statement

[redacted]

Date: [redacted]
Payee's Reference: [redacted]

[redacted]

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ [redacted]

Difference $

Amount Approved $ [redacted]

The reason for the difference was due to:

[redacted]

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

RRC

[redacted]
N. E. Stokes
Audit Section

R-III-B & F Form No. 4
4-15-52 D

OFFICE OF MINERALS EXPLORATION
824 New Customhouse
Denver 2, Colorado
November 24, 1958

Memorandum

To: T. A. Christensen

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA 4842 (Uranium) Contract Ide-R1183, E. J. Longyear Co., Representative, (San Mateo Dome Project) McKinley County, New Mexico - Operator's Monthly Progress Report for the month of October, 1958

Enclosed are the original and four copies each of Forms MF-104 and MF-104a, Operator's Narrative Report, and Engineer's Report for the above period.

The work is being performed partly under independent subcontract, and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Bids were not submitted for bulldozer work; however, the bulldozing rates are in line with the standard rates prevailing in the project locality for the size and make of bulldozer used on the project. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 50 percent of the amount reported on Form MF-104 for October 1958, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations, except for the following deduction:

Withhold an amount of $500.00 pending performance of additional work, or closing the account. All work under Stages I and III has been completed, and Government approval has not been granted for any of the work under Stages II and IV.

Remarks:

Date of Report----------November 1, 1958
Date Received in Field Office----------November 13, 1958
Date Received in Region Office----------November 21, 1958

Original signed by
J. W. TOWNSEND
J. W. Townsend

Enclosures

JWT:hsh

cc: Chmn. Op.Comm. (2)
Remalo, CMX/Tuc.
NF-104 file, Reg. III
Harshman } w/copy of Engr's
Cooper } Report
Charon

OME
DEPARTMENT OF THE INTE
NOV 21 1958
REGION III
DENVER, COLORADO

Novemb

Memorandum

To: J. W. Townsend, Executive Officer, OME Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject: Progress Report for October 1958, Docket DMEA-4842 (Uranium) Contract Idn-E1183, E. J. Longyear Co., Representative (San Mateo Dome Project) McKinley County, N. Mex.

Enclosed are the original and 4 copies of each the subject report and this operator's report that comprises a narrative section, Forms MF-104 and 104A, a location map, and geologic and radiometric logs. Also inclosed are 4 extra copies of subject report.

A progress inspection of the exploratory project of captioned contract was made by me October 14 and 16, 1958 in the company of W. L. Emerick, geologist, U. S. Geological Survey and B. F. Sorensen, project engineer. It included a review of maps and logs of completed holes at the operator's office in Grants, N. Mex. and a field inspection of drill sites, cores and sludges. The findings which follow are supplemental to those included in my Progress Report for September 1958.

Work completed to October 16, 1958 in addition to that previously reported included the non-core drilling and logging of holes Nos. G-18-32, G-19-32 and G-21-32. Work in progress was confined to the non-core drilling of holes Nos. G-20-32 and G-22-32, the last of the authorized 9 holes of Stage III. They had been drilled to respective depths of 1790 and 1220 feet. According to the Operator's Report, these 2 holes were bottomed October 24, 1958 and then were radiometrically logged. The data submitted with the Operator's Report is considered sufficient evidence that the 2 holes were completed without an on site inspection of the project.

CC Exec. Officer (Orig. & 8)
DMEA-4842
DF

TMRomslo:frj

The total footage drilled in the 5 completed holes was 10,340 of which 10,310 is allowable after deducting 30 feet of drilling (10 feet in hole G-18-32 and 20 feet in hole G-21-32) beyond the specified maximum of 20 feet in the Receptare formation.

The results of probing the 22 completed holes, 13 of Stage I and 9 of Stage III, indicates that 20 of the holes are barren and that the extent and degree of mineralization in the other 2 holes is not significant. Mineralization in the 2 holes, G-15-32 and G-16-32, occurs in the Poison Canyon sandstone at a depth of about 1880 feet and amounts to an indicated 1 to 3 feet of 0.03 to 0.04 percent eU_3O_8.

The operator has proposed that the contract be amended to change the location of 6 of the 8 holes of Stage IV to a presently unsubordinated area that is adjacent to the above mentioned 2 slightly mineralized holes. Recommendations relative to the proposal will shortly be submitted by Mr. Emerick and me.

ANALYSES OF THE OPERATOR'S REPORT

Form MF-104

Actual Costs - Documented by the certified invoices attached to the original copy of the Operator's report.

Drilling - The $17,572.50 is the cost of the 10,310 feet of approved non-core drilling in the 5 completed holes. It includes $11,250.00 for 7500 feet of drilling to depths of 1500 feet or less at $1.50 a foot and $6,322.50 for the 2810 feet of deeper drilling at $2.25 a foot.

Bulldozing - A total of 7½ hours was spent in the preparation of drilling sites and access roads with an RD-6 tractor-dozer at $15.00 per hour. As previous vouchers cover 8 of the authorized maximum of 12 hours for such work, the operator accordingly has charged to the project $60.00 for the remaining 4 hours of allowable work.

Probing - The $1124.09 is an allowable cost that includes $1031.00 for the Gamma-R logging of the allowable 10,310 feet of hole at 10 cents a foot, and $93.09 for the S.P. logging of 6206 feet of hole at 1½ cents a foot. The 6206 feet of S. P. logging does not include the 30 feet of excessive hole.

Stand-by Time - The $74.50 is an allowable cost that includes $7.50 for ½ hour of the 2 hours of drill-crew time at $15.00 per hour and $67.00 for 6.7 hours of logging-crew time at $10.00 per hour.

Fixed Costs -

Incidental Allowance - The $1,855.80 is the additional allowable cost of the 10,310 feet of drilling at 18 cents a foot.

Totals - The monthly total of $20,686.89 appears to be correct. The other totals, $76,200.10 and $96,886.99 also appear to be correct before the $0.81 disallowance of the July voucher.

Form MF-104A

The 2 sheets of this form have been properly completed.

Narrative Report

The narrative report with map and geologic and radiometric logs is acceptable.

T. M. Ramsle

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

Grants, New Mexico
November 1, 1958

United States Dept. of the Interior
Office of Minerals Exploration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting Executive Officer
OME Field Team, Region III

RE: Docket No. DMEA 4842 (Uranium)
Contract Idm-E1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Enclosed are the original and four copies of "Operators Unit Cost and Progress Report" covering work completed during October, 1958, on the San Mateo Dome Project under Docket No. DMEA 4842.

The original Report is supported by original or certified documentation of expenses.

We would appreciate having the check for reimbursement sent to our Denver Office.

Very truly yours,

E. J. LONGYEAR COMPANY

B. F. Sorenson
B. F. Sorenson
Project Engineer

Encl.

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

Grants, New Mexico
November 1, 1950

United States Dept. of the Interior
Office of Minerals Exploration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting ~~Executive Officer~~
Oil Field Team, Region III

Progress Report No. 6 (October, 1950)

Re: Docket No. DMEA 1042 (Uranium)
Contract Idm-31103
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Stage III drilling under DMEA Contract Idm-31103 was completed with the bottoming of holes 0-20-32 and 0-22-32 on October 24. Holes 0-18-32, 0-19-32, and 0-21-32 were completed earlier in the month.

Probing results indicate that holes 0-18-32, 0-19-32, 0-20-32, 0-21-32, and 0-22-32 are barren. Thus, of the 9 holes drilled to complete Stage III, 7 are considered barren and 2 (0-15-32 and 0-16-32) are slightly mineralized. The indicated mineralization is in the Poison Canyon sand at a depth of approximately 1080 feet and amounts to an estimated 1-3 feet of 0.03-0.04% eU_3O_8.

Stages I and III drilling have been completed and a request for an amendment to the Contract whereby further drilling could be approved is being prepared. Meantime all field operations have been discontinued.

Drilling (See attached map for hole locations)

Two rigs were in operation through October 24 at which time Stage III drilling was completed. One rig worked two 8-hour shifts per day during the entire period while the other rig worked two 8-hour shifts per day through October 7, then one 8-hour shift per day through October 24. Drill rigs operated on a schedule of

10 straight days on and 4 days off. One additional day was lost because of muddy roads. Drill crews worked 15 days and were off 9 days during the month. Footage drilled was 6,540 feet in 5 completed holes. Average feet drilled per calendar day was 272, or 136 per day per rig. Of the total footage represented by the completed holes (10,340), only 10,310 feet is submitted to DME for reimbursement.

COPY

Stage III (Completed October 24)

Hole G-18-32 Started September 26 and bottomed October 1 at a depth of 2050 feet. The Recapture was penetrated approximately 9 feet (see probing results). The hole was completed in 6 days for an average advance of 342 feet per calendar day.

Hole G-19-32 Started September 26 and bottomed October 1 at a total depth of 2080 feet. The Recapture was penetrated approximately 12 feet (see probing results). The hole was completed in 6 calendar days for an average drilling speed of 347 feet per day.

Hole G-20-32 Started October 1 and completed October 24 at a total depth of 2090 feet. The Recapture was penetrated approximately 16 feet (see probing results). The hole was completed in 24 calendar days (one rig operating one shift during 17 days) for an average advance of 87 feet per day. During this period 8 days were taken off for weekends, 1 day was lost due to muddy roads, and 2 days were spent washing the hole to enable it to be probed.

Hole G-21-32 Started October 1 and bottomed October 12 at a total depth of 2090 feet. The Recapture was penetrated approximately 49 feet. Drilling was completed in 11 calendar days for an average advance of 190 feet per day. Four days were taken off for weekends and 1 day was lost due to muddy roads.

Hole G-22-32 Started October 12 and bottomed October 24 at a depth of 2030 feet after penetrating the Recapture approximately 15 feet (see probing results). The hole was drilled in 12 days for an average advance of 254 feet per calendar day.

Sampling (see attached lithologic logs)

Dust and/or sludge samples were collected from every 10 feet of hole drilled. The samples were logged by a geologist and those through the Westwater were checked for radioactivity with a geiger counter. None of the samples checked showed radioactivity above background. Samples through the Westwater were sacked and saved for study by the Government.

Contacts cannot be definitely determined from sludge samples because of contamination. Therefore, there exist some descrepancies

between contacts picked from a study of the sludge samples and those picked from the geophysical logs. This difference is not great; however, contacts used as reference points are taken from geophysical logs because of their greater accuracy. In all holes drilled sludge samples indicated that the Recapture had been penetrated at least 20 feet.

COPY

Probing (See attached Electric Logs and Cross-sections)

Stage III (Completed October 24)

Hole G-18-32 Probed to 2066 feet on October 1. The probing showed the hole to be at least 16 feet deeper than the 2050 feet reported by the driller. No above-background radioactivity was noted and the hole is considered barren. The Westwater extends from 1846 to 2057 feet. A sand interval from 1784 to 1835 feet may be the Poison Canyon sand.

Hole G-19-32 Probed to 2090 feet on October 1. Probing showed the hole to be at least 10 feet deeper than the 2080 feet reported by the driller. No above-background radioactivity was noted and the hole is considered barren. A sand interval from 1887 to 1902 feet may be the Poison Canyon sand but thinning some at this location. The Westwater extends from 1929 to 2078 feet.

Hole G-20-32 Probed to 2100 feet on October 24. Results show the hole to be at least 10 feet deeper than the 2090 feet reported by the driller. Two attempts to probe the hole were unsuccessful due to caving, however, on the third attempt the probe reached bottom. No above-background radioactivity was noted and the hole is considered barren. The Westwater extends from 1920 to 2084 feet. The Poison Canyon sand is absent here having pinched-out somewhere between this hole and G-19-32.

Hole G-21-32 Probed to 2080 feet on October 12. No above-background radioactivity was noted and the hole is considered barren. The Westwater extends from 1863 to 2041 feet. The Poison Canyon sand is absent here having pinched-out somewhere between this hole and G-18-32.

Hole G-22-32 Probed to 2035 feet on October 24. Results show the hole to be at least 5 feet deeper than the 2030 feet reported by the driller. At 1135 feet the Self Potential instruments went out of order, consequently, below that point no Self Potential was recorded. No above-background radioactivity was noted and the hole is considered barren. The Westwater extends from 1834 to 2020 feet. The Poison Canyon sand is absent here having pinched out somewhere to the west before reaching this point.

General

Drilling under Stages I and III has been completed.

United States Dept. of the Interior November 1, 1958

DMEA Contract Idm-81183 specifies that upon completion of Stages I and III no further drilling may be undertaken without prior approval, in writing, by the Government. A request for further drilling has been prepared and will be submitted during the first week of November; however, at present all field operations under the Contract have been discontinued.

Drilling and Related Costs (For Month of October, 1958)

Actual Costs (Stage III)

Category (1) Independent Contracts	Cost to SMDP	Cost submitted to DMEA
7,500 feet of non-core drilling 0-1,500 ft. depths, @ $1.50/ft.	$11,250.00	$11,250.00
2,840 feet non-core drilling 1,500-2,200 ft. depths, @ $2.25/ft.	6,390.00	6,322.50
2 hrs. drill crew standby time @ $15.00/hr.	30.00	7.50
10,371 feet probing and logging @$0.115/ft.	1,130.64	1,124.09
8.4 hrs. logging and standby time @ $10.00/hr. and $17.00/hr.	95.90	67.00
Cost of Washout time 12 hours @ $15.00/hr.	180.00	----
7.5 hrs. bulldozing @ $15.00/hr.	112.50	60.00
Fixed Unit Costs		
Incidental Allowance for each foot of hole drilled, 10,340 feet @ $0.18/ft.	1,861.20	1,855.80
2% New Mexico School Tax	359.25	---
Grand Total:	$21,409.49	$20,686.89

Total Expenditure (Stage III) submitted to DMEA for October, 1958: $20,686.89

Government participation @ 50% $10,343.45

E. J. LONGYEAR COMPANY

B. F. Sorensen
Project Engineer

COPY

E. J. LONGYEAR COMPANY

DRILL HOLE NO. 8-18-32

SAN MATEO DOME PROJECT

Exploration at Sect. 32, T1N, R8W, McKinley (county) New Mexico (state)
(mine, prospect, or place)

For San Mateo Dome Project
(company, group, or individual)

Date started 9/25/58 Completed 10/1/58

Coordinates (or bearing and distance from a reference point) N 112,300 E 562,100

Driller Scott Brothers

Sampler Bruce Russell

Inclination from horizontal Vertical

Collar elevation 7457.62

Bearing

(Specific gravity of core from ____ft.- ____; ____ft.- ____; ____ft.- ____; ____ft.- ____.)

Interval Drilled			Core Recovery		Bit Size	Character of Material and Remarks	Sample Record		
From	To	Feet	Feet	%			No.	From	To
0	50	50	Sludge		4-3/4	Buff sandy overburden			
50	370	320	Sludge		"	Gray shale, sandstone, siltstone and mudstone.		Dakota	
370	520	150	Sludge		"	Gray carbonaceous shale with some local sandstone beds.		Dilco?	
520	620	100	Sludge		"	Gray to white, medium to fine grained sandstone.		Gallup	
620	1640	1020	Sludge		"	Gray shale, siltstone & mudstone. Sandstone lenses at 1340-1360, and 1550-1580.		Mancos	
1640	1680	40	Sludge		"	Tan to gray, medium to fine grained sandstone.		Dakota	
1680	1810	130	Sludge		"	Variegated red, green, and gray shale.		Brushy Basin	
1810	2020	210	Sludge		"	White to gray, medium to fine grained arkosic sandstone. (With some local coarse zones.)		Westwater	
2020	2050	30	Sludge		"	Red and green shale.		Recapture?	
	CERTIFIED TRUE COPY				Note:	All samples through the Westwater sand were checked with a Model 107B Geiger counter and no above-background radioactivity was recorded.			
	[signature]								
	PROJECT ENGINEER								

(Principally for core data. See Form B when sludge is saved.)

E. J. LONGYEAR COMPANY

DRILL HOLE NO. G-19-32

SAN MATEO DOME PROJECT

Exploration at Sect. 32, T14N, R8W (mine, prospect, or place), McKinley (county) New Mexico (state)

For San Mateo Dome Project (company, group, or individual)

Date started 9/25/58 Completed 10/1/58

Coordinates (or bearing and distance from a reference point) N 313,301 E 562,189

Driller Scott Brothers

Sampler Bruce Russell

Inclination from horizontal Vertical

Collar elevation 7517.39

Bearing

(Specific gravity of core from ____ft.= ____; ____ft.= ____; ____ft.= ____; ____ft.= ____.)

Interval Drilled			Core Recovery		Bit Size	Character of Material and Remarks	Sample Record		
From	To	Feet	Feet	%			No.	From	To
0	60	60	Sludge		"	Buff sandy overburden			
60	390	330	Sludge		"	Gray shale, sandstone, siltstone and mudstone.		Mulatto	
390	540	150	Sludge		"	Gray carbonaceous shale with some local sandstone beds.		Dilco?	
540	660	120	Sludge		"	Gray to white, medium to fine grained sandstone.		Gallup	
660	1700	1040	Sludge		"	Gray shale, siltstone & Mudstone. Sandstone lenses		Mancos	
						at 1410-1440, 1540-1560, and 1620-1660.			
1700	1740	40	Sludge		"	Tan to gray, medium to fine grained sandstone.		Dakota	
1740	1890	150	Sludge		"	Variegated red, green, and gray shale.		Brushy Basin	
1890	2060	170	Sludge		"	White to gray, medium to fine grained arkosic sandstone.		Westwater	
						(With some local coarse zones.)			
2060	2080	20	Sludge		"	Red and green shale.		Recapture?	
	CERTIFIED TRUE COPY				Note:	All samples through the Westwater sand were checked with a Model 107B Geiger			
						counter and no above-background radio-			
						activity was recorded.			
	PROJECT ENGINEER								

FORM A

(Principally for core data. See Form B when sludge is saved.)

E. J. LONGYEAR COMPANY

DRILL HOLE NO. G-20-32

SAN MATEO DOME PROJECT

Exploration at Section 32, T14N, R8W (mine, prospect, or place), McKinley (county), New Mexico (state)

For San Mateo Dome Project (company, group, or individual)

Date started 10/1/58 Completed 10/22/58

Coordinates (or bearing and distance from a reference point) N 313,300 E 563,188

Driller Scott Brothers

Sampler Bruce Russell

Inclination from horizontal Vertical

Collar elevation 7496.92

Bearing

(Specific gravity of core from ____ ft.- ____; ____ ft.- ____; ____ ft.- ____; ____ ft.- ____.)

Interval Drilled From	To	Feet	Core Recovery Feet	%	Bit Size	Character of Material and Remarks	Sample Record No.	From	To
0	30	30	Sludge		4-3/4	Buff sandy overburden.			
30	410	380	Sludge		"	Gray shale, siltstone and mudstone.		Malatte	
410	560	150	Sludge		"	Gray carbonaceous shale with local sandstone beds.		Dilco?	
560	670	110	Sludge		"	Gray to white, medium to fine grained sandstone.		Gallup	
670	1690	1020	Sludge		"	Gray shale, siltstone and mudstone. Sandstone lenses		Mancos	
						at: (1400-1430). (1530-1560), and (1600-1620).			
1690	1730	40	Sludge		"	Tan to gray, medium to fine grained sandstone.		Dakota	
1730	1860	130	Sludge		"	Gray and green shale.		Brushy Basin	
1860	2070	210	Sludge		"	Gray to white, medium to fine grained arkosic sandstone.		Westwater	
						(with some local coarse zones).			
2070	2090	20	Sludge		"	Red and green shale		Recapture	
	CERTIFIED TRUE COPY								
					Note:	All samples through the Westwater sand were checked with a Model 107B Geiger			
	B. F. Sorensen Project Engineer					counter and no above-background radio-activity was recorded.			

FORM A

(Principally for core data. See Form B when sludge is saved.)

E. J. LONGYEAR COMPANY

DRILL HOLE NO. 0-21-32

SAN MATEO DOME PROJECT

Exploration at Section 32, T1N, R8W, McKinley New Mexico
(mine, prospect, or place) (county) (state)

For San Mateo Dome Project
(company, group, or individual)

Date started 10/1/52 Completed 10/2/52 Coordinates (or bearing and distance from a reference point) N 310,[illegible] E 951,107

Driller [illegible] Brothers

Gauger Bruce Russell Inclination from horizontal Vertical

Collar elevation 7456.37 Bearing

(Specific gravity of core from ____ ft.- ____; ____ ft.- ____; ____ ft.- ____; ____ ft.- ____.)

Interval Drilled			Core Recovery		Bit Size	Character of Material and Remarks	Sample Record		
From	To	Feet	Feet	%			No.	From	To
0	40	40	Sludge		6-3/4	Buff, sandy siltstone.			
40	340	300	Sludge		"	Gray shale, siltstone and sandstone.		[illegible]	
340	540	150	Sludge		"	Gray [illegible] shale: [illegible] sandstone.		Dikes?	
540	640	100	Sludge		"	Gray to white, medium to fine grained sandstone.		[illegible]	
640	[illegible]	1050	Sludge		"	Gray shale, siltstone, and sandstone. Sandstone layers at: 1340-1360, 1450-1500, and 1610-1630.		[illegible]	
1690	1690	40	Sludge		"	Tan to gray, medium to fine grained sandstone.		[illegible]	
1690	[illegible]	160	Sludge		"	[illegible] Gray and green shale.		[illegible]	
[illegible]	[illegible]	[illegible]	Sludge		"	Gray to white, medium to fine grained arkosic sandstone. (With some local coarse zones).		[illegible]	
[illegible]	[illegible]	40	Sludge		"	Red and green shale.		[illegible]	
CONFIDENTIAL COPY									
					NOTE:	All samples through the Westerly Sand were checked with a Model 107B Geiger counter and no above-background radioactivity was recorded.			

[illegible]
Project Engineer

(Principally for core data. See Form B when sludge is saved.)

E. J. LONGYEAR COMPANY

DRILL HOLE NO. 9-22-32

SAN MATEO DOME PROJECT

Exploration at Section 32, T14N, R8W (mine, prospect, or place), McKinley (county) New Mexico (state)

For San Mateo Dome Project (company, group, or individual)

Date started 10/12/58 Completed 10/21/58

Driller Scott Brothers

Sampler Bruce Russell

Collar elevation 7128.08

Coordinates (or bearing and distance from a reference point) N 311,303 E 563,186

Inclination from horizontal Vertical

Bearing

(Specific gravity of core from _____ ft.= _____; _____ ft.= _____; _____ ft.= _____; _____ ft.= _____.)

Interval Drilled From	To	Feet	Core Recovery Feet	%	Bit Size	Character of Material and Remarks	Sample Record No.	From	To
0	50	50	Sludge		4-3/4	Buff sandy overburden			
50	320	270	Sludge		"	Gray shale, siltstone, and mudstone.		Mulatto	
320	470	150	Sludge		"	Gray carbonaceous shale with local sandstone beds.		Dilco?	
470	580	110	Sludge		"	Gray to white, medium to fine grained sandstone.		Gallup	
580	1620	1040	Sludge		"	Gray shale, siltstone and mudstone. Sandstone lenses		Mancos	
						at: (1340-1360) and (1530-1550).			
1620	1660	40	Sludge		"	Tan to gray, medium to fine grained sandstone.		Dakota	
1660	1800	140	Sludge		"	Gray and green shale.		Brushy Basin	
1800	2010	210	Sludge		"	Gray to white, medium to fine grained arkosic sandstone.		Westwater	
						(with some local coarse zones).			
2010	2030	20	Sludge		"	Red and green shale.		Recapture	
	CERTIFIED TRUE COPY				Note:	All samples through the Westwater sand			
						were checked with a Model 107B Geiger counter and no above-background radio-			
	B. F. Sorenson Project Engineer					activity was recorded.			

Form MF-104 (Rev.)*
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

U. S. BUREAU OF MINES SOUTHWEST EXPERIMENT STATION TUCSON, ARIZONA RECEIVED NOV 14 1958 OCT 20 1958 A.I.M.E.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1958 Docket No. DMEA 48-2 Contract No. idm-E1103
Operator's Name E.J. Longyear Company, Agent, San Mateo Dome Project Minerals Uranium
Address Box 998 Grants, New Mexico
Contract Amount, $ 176,770.00 Government Participation: 75% 50% Amount, $ 114,235.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:		STAGE I & STAGE III				
Drilling	23,321.00	41,624.50	64,945.50			
Bulldozing	225.00	465.00	690.00			
Grossulation	---	82.00	82.00			
Drifting						
Probing	1,364.70	2,515.39	3,080.09			
Standby time	179.50	123.50	303.00			
(2) Labor and Supervision:						
Labor						
Supervision	2,184.66	4,032.72	6,217.38			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core boxes	41.06	41.07	82.13			
(8) Contingencies (specify):						
Incidental Allowance						
Circulation material						
Stage I 75% of 10,519.88 =						7889.91
Stage III 50% of 16,796.04 =						8398.02
					48883.37	76,199.29
TOTALS	27,315.92	48,884.18	76,200.10	27,315.92	48884.18	76,200.10

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

Date Oct. 5, 1958 *Payee E. J. Longyear Company

Per R. E. Sorensen Title Project Engineer

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

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 16,287.93

Signature RRR
(Authorized Certifying Officer)

Date 11-10-58 Vou. No. DMEA-59-61

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E1183 in accordance with the terms of the contract.

Signature D M Ramsdo Title Mining Engineer Date Oct 21, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Checked for Accounting Allowability

Signature J W Summerd Title Executive Officer Date NOV 7 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

U.S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
RECEIVED
OCT 20 1958
NOV 14 1958
TUCSON, ARIZONA
O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 195 8 Docket No. DMEA 4842 Contract No. IDM-E1183
Operator's Name E. J. Longyear Company, Agent, San Mateo Dome Proj. Minerals Uranium
Address Box 998, Grants, New Mexico

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting		SHEET I -		STAGE I				
Crosscutting								
Raising								
~~Shafts~~ Drill Crew Standby hr		15.00	1	82.50	5.5	15.00	13	15.00
~~Winzes~~ Logging crew Standby hr		30.00	3	86.00	8.6	10.00	13	10.00
Drilling: Core	feet	3,341.00	257	7,683.00	591	13.00	700	13.00
Non-Core ~~Open~~ 0-1500	feet	4,500.00	3000	29,250.00	19,500	1.50	19,500	1.50
Non-Core ~~Angul~~ 1500-2000	feet	1,350.00	600	13,882.50	6,170	2.25	6,000	2.25
~~Stripping~~ Circul Material		----	---	82.00	2.05	40.00	13	40.00
~~Trenching~~ Probing	feet	443.56	3,857	2,958.95	26,166	0.113	26,200	0.115
~~Test Pits~~ Core Boxes	Boxes	41.06	35	82.13	70	1.17	70	1.25
~~Equipment~~ Bulldozg	hr	105.00	7	570.00	38	15.00	40	15.00
Incidntal Allowances	feet	694.26	3,857	4,726.98	26,261	0.18	26,200	0.18
TOTAL DISTRIBUTED COSTS		10,519.88		59,404.06				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10,519.88		59,404.06				61,261.50

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 5, 1958 Operator E. J. Longyear Company

Per B. F. Sorensen Title Project Engineer

REMARKS: Stage I drilling has been completed and the above tabulation represent all totals expended under Stage I, however, footage totals are above that which is authorized under Stage I but is here tabulated with the thought that the excess footage can be taken from the alloted Stage II drilling. A request for such action is being submitted under separate cover.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

U.S. BUREAU OF MINES
SOUTHWEST EXPLORATION STATION
OCT 2 1958
TUCSON, ARIZONA
RECEIVED
NOV 14 1958
D.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1958 Docket No. DMEA 4842 Contract No. IDM-E1183
Operator's Name E.J. Longyear Company, Agent, San Mateo Dome Project Minerals Uranium
Address Box 998, Grants, New Mexico

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting		SHEET II	-	STAGE III				
Crosscutting								
Raising								
Drill Crew Standby	hr	127.50	8.5	127.50	8.5	15.00	9	15.00
Logging "	hr	7.00	0.7	7.00	.7	10.00	9	10.00
Drilling:								
Non-Core 0-1500	ft	9,000.00	6000	9000.00	6000	1.50	13500	1.50
Non-Core 1500-2000	ft	5,130.00	2280	5130.00	2280	2.25	5400	2.25
Circulating Material	--	---	--	----	----	----	9	40.00
Probing	ft	921.14	8280	921.14	8280	0.111	18900	0.115
Bulldozing	hr	120.00	8	120.00	8	15.00	12	15.00
Incidental Allowance	ft	1,490.40	8280	1,490.40	8280	0.18	18900	0.18
TOTAL DISTRIBUTED COSTS		16,796.04		16,796.04				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								38,815.50
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		16,796.04		16,796.04				38,815.50

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 5, 1958 Operator E. J. Longyear Company

Per B F Sorensen
B. F. Sorensen Title Project Engineer

REMARKS: Because Stage I was completed in September both Stage I and Stage III will appear. on Forms MF104 and MF 104A-therefore Stage I reported on Sheet I and Stage III reported on Sheet II of Forms MF 104 and MF 104A.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only) M Romero

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

FINAL DISTRIBUTION
MADE NOV 12 1958

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

294 New Customhouse
Denver 2, Colorado
November 7, 1958

EXTRA COPY O. M. E. RECEIVED NOV 14 1958		
DATE	INITIALS	CODE
		800

Memorandum

To: T. A. Christensen

From: Executive Officer, ORE Field Team, Region III

Subject: Docket No. [illegible] (Premium) Contract [illegible]; R. J. Longyear Co., Representative, (San Mateo Dome Project) McKinley County, New Mexico - Operator's Monthly Progress Report for the month of September, 1958

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

The work is being performed partly under independent subcontract, and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Bids were not submitted for bulldozer work; however, the bulldozing rates are in line with the standard rates prevailing in the project locality for the size and make of bulldozer used on the project. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended on the following basis contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

The contract provides for 75 percent contribution by the Government in the acceptable costs under Stages I and II, and 50 percent under Stages III and IV. During September 1958, work was performed under Stages I and III; therefore, Government contribution is recommended as follows:

Amount reported, Stage I----------$10,519.88
Government contribution at 75 percent----------$7,889.91

Amount reported, Stage III----------$16,796.04
Government contribution at 50 percent---------- 8,398.02

Total reported cost for September, 1958-27,315.92
Total Government contribution----------$16,287.93

Remarks:

Date of Report----------October 5, 1958
Date Received in Field Office----------October 20, 1958
Date Received in Region Office----------October 24, 1958

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosures

JWC:bsh

cc: Chairman, Op. Comm. (2)
Ramalo, GSS/Tus.
MF-104 file, Reg. III
Hartmann
Emerick } w/copy of Engr's Report
Cooper
Churon

OME
DEPARTMENT OF THE INTERIOR

OCT 24 1958
REGION III
DENVER, COLORADO

October 23, 1958

Memorandum

To: Executive Officer, OME Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject: Progress Report for September 1958, Docket DMEA-4842 (Uranium) Contract Ida-E1183, E. J. Longyear Co., Representative (San Mateo Dome Project) McKinley County, N. Mex.

Enclosed are the original and 4 copies of each the subject report and the operator's report that comprises a narrative section, a location map, and geologic and radiometric logs. Included with the original of the operator's report are certified invoices covering the costs of drilling, probing and core boxes. Also inclosed are 4 extra copies of subject report.

My inspection of the project was made October 14 and 16, 1958 in the company of W. L. Emerick, geologist, U. S. Geological Survey and B. F. Sorensen, project engineer. It included a review of maps and geologic and radiometric logs at the company's office in Grants, N. Mex. and a field inspection of drill sites, cores and sludges. Pertinent findings from the inspection are as follows:

1. All work of Stage 1 was finished with the completion of holes G-9-27, 1 of the 2 that was cored in part, and G-13-27.

2. Four holes, G-14-32, G-15-32, G-16-32, and G-17-32, of the authorized 6 holes of stage III were completed.

3. The total footage drilled in the 6 completed holes was 12,177 of which 12,137 is allowable after deducting 40 feet of non-core drilling (20 feet in hole G-13-27 and 10 feet in each hole G-15-32 and G-16-32) that penetrated the Recapture formation more than the specified maximum of 20 feet. Excessive drilling is based on the written geologic logs.

cc Exec. Officer (Orig. & 8)
DMEA-4842
DF

TMRomslo:frj

FORM 311A 10M 3-56

Longyear

LONGYEAR COMPANY
General Offices: Foshay Tower
Minneapolis 2, Minnesota, U.S.A.
TELEPHONE: FEDERAL 2-2447 • CABLE: LONGCO

U.S. BUREAU OF MINES
MINES EXPERIMENT STATION
OCT 20 1958
TUCSON, ARIZONA

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

Grants, New Mexico
October 3, 1958

OME
DEPARTMENT OF THE INTERIOR
OCT 24 1958
REGION III
DENVER, COLORADO

United States Dept. of the Interior
Office of Mineral Exploration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Marshman, Acting Executive Officer
OME Field Team, Region III

RE: Docket No. DMEA 4842 (Uranium)
Contract IDM-K1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Enclosed are the original and four copies of Operators "Unit Cost and Progress Report" covering work completed during September, 1958, on the San Mateo Dome Project under Docket No. DMEA 4842.

The original Report is supported by original or certified documentation of expenses.

We would appreciate having the check for reimbursement sent to our Denver Office.

Very truly yours,

E. J. LONGYEAR COMPANY

B. Sorensen

B. F. Sorensen
Project Engineer

Encl.

FORM 311A 10M 3-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
OCT 20 1958
TUCSON, ARIZONA

Grants, New Mexico
October 5, 1958

United States Dept. of the Interior
Office of Mineral Exploration
234 New Customhouse
Denver 2, Colorado

Attention: E. W. Marshman, Acting Executive Officer
OME Field Team, Region III

Progress Report No. 5 (September, 1958) RE: Docket No. DMEA 4842 (Uranium)
Contract IBM-21183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley, County, New Mexico

Gentlemen:

Drilling under DMEA Docket No. 4842 continues on the San Mateo Dome Project at the rate of approximately 12,000 feet per month. During September 6 holes were completed. Stage I drilling was completed when holes G-9-27 and G-13-27 were bottomed, and Stage III drilling started with the completion of holes G-14-32, G-15-32, G-16-32, and G-17-32. Holes G-18-32 and G-19-32 were started and are expected to be bottomed during the first week of October.

Probing results from holes G-9-27 and G-13-27 show the holes to be barren. Thus, 13 holes have been drilled to complete Stage I drilling and all 13 holes are considered barren.

Probing results under Stage III drilling indicate holes G-14-32 and G-17-32 are barren and holes G-15-32 and G-16-32 are mineralized. The indicated mineralization is in the Poison Canyon sand at a depth of approximately 1880 feet. The mineralization is only slight, amounting to an estimated 1-3 feet of 0.03-0.04 % U_3O_8.

It is expected that Stage III drilling will be completed before October 15.

<u>Drilling</u>: (See attached map for hole locations)

Two rigs were in operation throughout the month on a schedule of 10 straight days on and 4 days off. Drill crews worked 24 days and were off 6 days. Footage drilled was 10,432 feet in 6 completed holes, and 3,800 feet in

two other holes, as yet incomplete. Average feet drilled per calendar day was 593, or 296 per day per rig. Of the total footage represented by the completed holes (12,177), only 12,137 is submitted to DMEA for reimbursement. Some 190 feet were drilled in excess of the number allowed in the 1500-2200 foot interval of Stage I drilling; however, this footage is being submitted for reimbursement on Forms 104 and 104A in the hopes that this footage and funds can be transferred from Stage II.

Stage I (Completed September 10)

Hole G-9-27 - Started August 20 and completed September 6. Bottomed at 1907 feet after penetrating and Recapture approximately 19 feet. Coring started at 1650 feet and continued to 1907 feet. Core recovery was 91%. Average footage cored per calendar day was 28 feet. Average footage drilled per calendar day was 106 feet or 53 feet per day per shift.

Hole G-13-27 - Started September 2 and completed September 10. Bottomed at 1970 feet after penetrating the Recapture approximately 59 feet. The hole was drilled in 9 days at an average of 212 feet per day. Drill crews were off 4 days.

Stage I drilling was started June 13 and completed September 10, 1958. A total of 26,376 feet were drilled in 13 holes. Two holes were cored through the Westwater member. A total of 591 feet were cored at an average recovery of 90%. Average drilling advance per calendar day was 293 feet.

Stage III

Hole G-14-32 - Started September 8 and completed September 15 at a total depth of 2080 feet. The Recapture was penetrated approximately 32 feet. The 2080 feet were drilled in 8 days for an average advance of 260 feet per day.

Hole G-15-32 - Started September 10 and bottomed September 15 at 2070 feet. The Recapture was penetrated approximately 25 feet. Six calendar days were required for completion of the hole for an average advance of 345 feet per day. Two cones from the bit remain at bottom of the hole.

Hole G-16-32 - Started on September 15. Bottomed September 25 at 2080 feet. The Recapture was penetrated approximately 30 feet. The hole was completed in 11 days at an average drilling speed of 190 feet per calendar day. The drill crews were off September 18, 19, 20, and 21.

Hole G-17-32 - Started September 16 and finished September 25. About 30 feet of Recapture was penetrated in this 2070-foot hole. Drilling was done in 10 days at an average rate of 207 feet per day. The drill crews were off September 18, 19, 20, and 21. Some difficulty with loss of circulation was encountered in the hole.

Hole G-18-32 - Started September 26. Depth at the end of the month was 1900 feet. It is expected that the hole will bottom on October 1 or 2.

Hole G-19-32 - Started September 26. Depth at the end of the month was 1900 feet. It is expected that the hole will bottom on October 1 or 2.

COPY

Sampling (See attached lithologic logs)

Dust and/or sludge samples were collected from every 10 feet of hole drilled. The samples were logged by a geologist and those through the Westwater were checked for radioactivity with a geiger counter. None of the samples checked showed radioactivity above background. Samples through the Westwater were sacked and saved for study by the Government.

Contacts cannot be definitely determined from samples because of contamination. Therefore, there exists some discrepancies between contacts picked from a study of the sludge samples and those picked from the geophysical logs. This difference is not great; however, contacts used as reference points are taken from geophysical logs because of their greater accuracy. In all holes drilled sludge samples indicated that the Recapture had been penetrated at least 20 feet.

When core drilling, all core is checked for radioactivity, stored in core boxes, and saved for future study.

Hole G-9-27 was cored through the bottom 257 feet. Core recovery was 234 feet or 91%. Contacts were difficult to pick because of their gradational nature; however, the Brushy Basin-Westwater contact was picked at 1705 feet and the Westwater Recapture contact was picked at 1888 feet.

Core through the Westwater appears gray or bleached and contains coarse grained, poorly sorted, arkosic zones; however, no above background radioactivity was noted and none of the core was deemed worthy of chemical assay.

Probing (See attached Electric Logs and Cross-sections)

Stage I

Hole G-9-27 - Probed to 1905 feet on September 6. No above background radioactivity was noted and the hole is considered barren. The Westwater is thought to extend from 1720 to 1900 feet. No Poison Canyon sand was recognized in the interval.

Hole G-13-27 - Probed to 1970 feet on September 10. No above background radioactivity was noted and the hole is considered barren. The Westwater extends from 1760 to 1911 feet. Poison Canyon sand was not recognized and it is thought to be missing in the area.

Stage III

Hole G-14-32 - Probed to 2090 feet on September 15. Above background count was noted at 1915 feet but of slight intensity and is not considered significant. The hole is considered barren. The Westwater extends from 1863 feet to 2058 feet. The top 57 feet of the interval is thought to be Poison Canyon sand.

COPY

Hole G-15-32 - Probed to 2070 feet on September 15. Mineralization is noted between 1876 and 1877 feet where a reading of 300 counts per second indicates the presence of a 1-foot interval at an estimated grade of 0.09% eU_3O_8. The Westwater extends from 1857 feet to 2045 feet. The upper 38 feet of the interval is thought to be Poison Canyon sand and is where the indicated mineralization exists.

Hole G-16-32 - Probed to 2073 feet on September 23. Mineralization is noted between 1884 and 1885 feet where a reading of 96 counts per second indicates the presence of a 1-foot interval at an estimated grade of 0.03% eU_3O_8. The Westwater extends from 1832 to 2030 feet. The upper 64 feet of the interval is thought to be Poison Canyon sand and is where the indicated mineralization exists.

Hole G-17-32 - Probed to 2049 feet on September 25. No above background radioactivity was recorded and the hole is considered barren. The Westwater extends from 1842 to 2041 feet. The upper 73 feet of the interval is thought to be the Poison Canyon sand.

General

Stage I drilling was completed on September 10. Stage III drilling is now 65% complete and is scheduled for completion about the middle of October. Any requests to be made concerning Stages II and IV drilling await evaluation of the results of Stage III holes, and should a request be made it will be submitted late in the month of October.

Drilling and Related Costs (For Month of September, 1958)

Part I (Stage I)

Actual Costs (Stage I)

Category (1) Independent Contracts	Cost to RMP	Cost submitted to RMEA
3,000 feet of non-core drilling 0 - 1,500 ft. depths, @ $1.50/ft.	$4,500.00	$ 4,500.00
620 feet non-core drilling 1,500 - 2,200 ft. depths, @ $2.25/ft.	1,395.00	1,350.00
257 feet core drilling @ $13.00/ft.	3,341.00	3,341.00
1 hr. drill crew standby time @ $15.00/hr.	15.00	15.00
3,875 feet probing and logging @ $0.115/ft.	445.63	443.56
3 hrs. logging & standby time @ $10.00/hr.	30.00	30.00
Cost of lost circulation material in excess of $100.00 per hole	----	----
7 hrs. bulldozing @ $15.00/hr.	105.00	105.00

COPY

Actual Costs (Stage I Continued)

Category (1) Independent Contracts	Cost to SMDP	Cost submitted to BMEA
35 core boxes @ $1.25/box	$ 41.06	$ 41.06
Fixed Unit Costs		
Incidental Allowance for each foot of hole drilled, 3,877 feet @ $0.18/ft.	697.86	694.26
2% New Mexico School Tax	187.12	----
Grand Total:	$10,757.67	$10,519.88

Total Expenditure (Stage I) submitted to BMEA for September, 1958: $10,519.88

Government participation @ 75% 7,889.91

PART II (Stage III)

Actual Costs (Stage III)

Category (1) Independent Contracts	Cost to SMDP	Cost submitted to BMEA
6,000 feet of non-core drilling @ - 1,500 ft. depths, @ $1.50/ft.	$ 9,000.00	$ 9,000.00
2,300 feet non-core drilling 1,500 - 2,200 ft. depths, @ $2.25/ft.	5,175.00	5,130.00
8.5 hrs. drill crew standby time @ $15.00/hr.	127.50	127.50
8,312 feet probing and logging @ $0.115/ft.	924.34	921.14
0.7 hrs. logging and standby time @ $10.00/hr.	7.00	7.00
Cost of lost circulation material in excess of $100.00 per hole	----	----
8 hrs. bulldozing @ $15.00/hr.	120.00	120.00
Fixed Unit Costs		
Incidental Allowance for each foot of hole drilled, 8,300 feet @ $0.18/ft.	1,494.00	1,490.40
2% New Mexico School Tax	288.45	-----
Grand Total:	$17,136.29	$16,796.04

COPY

Total Expenditure (Stage III) submitted to DNEA for September, 1958	$16,796.04
Government participation @ 50%	$ 8,398.02
Combined Stage I and Stage III expenditures submitted to DNEA for September, 1958:	$27,315.92
Government participation (Total for September):	$16,287.93

COPY

K. J. LONGKHAR COMPANY

B. F. Sorensen
Project Engineer

Form MF-103 (Rev.)
(April 1952)

DMEA
Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED OCT 8 1958 D.M.E.A.
SEP 15 1958 REGION III DENVER, COLORADO

Month of August 1958 Docket No. DMEA 4886 Contract No. IDM-E1183
Operator's Name E. J. Longyear Company, Agent, San Mateo Dome Proj. Minerals Uranium
Address P. O. Box 998, Grants, New Mexico
Contract Amount, $ 176,770.00 Government Participation: 75 & 50% % Amount, $ 114,235.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
	S T A G E - I					
(1) Independent Short Form Contracts:						
Drilling	20,790.00	20,834.50	41,624.50			
Circulation Material	285.00	180.00	465.00			
Assayer	------	82.00	82.00			
Crosscutting						
Diamond Prospecting	1,377.66	1,139.15	2,516.81			
Drifting						
Stand by Time	97.50	66.00	163.50			
(2) Labor and Supervision:						
Allow.	2,203.20	1,829.52	4,032.72			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes		41.07	41.07			
(8) Contingencies (specify):						
TOTALS	24,753.36	24,172.24	48,925.60	24,712.94	24,172.24	48,884.18

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sept. 2, 1958 *Payee E. J. Longyear Company
Per B. F. Sorensen Title Project Engineer

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

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
24,171.43 D-81 48883.37 U-81
$ 18,533 96
Signature
(Authorized Certifying Officer)
Date 10/2/58 Voucher No. DMEA 59-44
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Eda-1183 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 9/10/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Checked for Engineering Adequability

Signature [illegible] Title Executive Officer Date SEP 30 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

DMEA
DEPARTMENT OF THE INTERIOR
SEP 15 1958
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1958 Docket No. DMEA 4862 Contract No. IDM-X1183
Operator's Name E. J. Longyear Company, Agent, San Mateo Dome Project Minerals Uranium
Address P. O. Box 998, Grants, New Mexico

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
			STAGE 1					
Drifting								
Crosscutting								
Raising								
Shafts: Drill Crew Stand	Hr	37.50	2.5	67.50	4.5	15.00	13	15.00
Shafts: Engine Crew Stand	Hr	60.00	6.0	96.00	9.6	10.00	13	10.00
Winzes								
Drilling: Core	feet	------	------	4,362.00	336	13.00	700	13.00
Non-Coring: Churn 0-1500	feet	13,500.00	9,000	26,750.00	16,500	1.50	19,500	1.50
Non-Coring: Auger 1500-2200	feet	2,290.00	3,340	12,532.50	5,570	2.25	6,000	2.25
Circulation Mud		------	------	82.00	2.05	40.00	13	40.00
Stripping								
Probing	feet	1,377.66	12,340	2,316.81	22,406	0.112	26,200	0.113
Trenching								
Core Boxes	Boxes	------	----	41.07	35	1.17	70	1.25
Test Pits								
Buildings	Hr.	285.00	19	465.00	31	15.00	40	15.00
Roads and Trails								
Incidental Allowance	feet	2,203.20	12,340	4,032.72	22,406	0.18	26,200	0.18
Total Distributed Costs		24,753.36		48,925.60				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		24,753.36		48,925.60				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 2, 1958 Operator E. J. Longyear Company

Per B. F. Sorenson Title Project Engineer

B. F. Sorenson

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks:

(Instructions on reverse)

(For Government use only)

D W Romero

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXTRA COPY
O. M. E.
RECEIVED OCT 8 1958

DATE	INITIALS	CODE
		~~700~~ S
		800

FINAL DISTRIBUTION

MADE OCT 6 1958

DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

Administrative Audit Difference Statement

Date: October 2, 1958
Payee's Reference: August 1958

San Juan Dam Project
R. J. Longyear Company, Agent
416 Colorado Building
Durango, Colorado

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 4,753.36

Difference $ 41.42

Amount Approved $ 4,711.94

The reason for the difference was due to:

Miscellaneous, Logging Crew Standby Time

The Operator has reported the cost of 6 hours travel time for the logging crew, under "Logging Crew Standby Time." The contract does not provide for travel time; therefore, the reported cost for logging crew travel time is disallowed as follows:

Reported cost, 6 hours standby time at $10.00 per hour	$60.00
Allowable cost 2 hours actual standby time at $10.00 per hour	20.00
Amount disallowed	$40.00

(CONTINUED ON ATTACHED SHEET)

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-III-B & F Form No. 4
4-15-52 D

Disallowance, Self Potential Probing

The Operator has failed to report 95 feet of drilling for the period; therefore, self potential probing for 95 feet of unreported drilling is disallowed as follows:

Disallowed, reported cost for 95 feet self potential probing at $0.15 per foot ---------- $1.42

Total amount to be disallowed ---------- $41.42

224 New Customhouse
Denver 2, Colorado
Sept. 30, 1958

Memorandum

To: T. A. Christensen

From: Acting Executive Officer, OGE Field Team, Region III

Subject: Docket No. [illegible] 4842 (Unnamed) Contract I[illegible]-K1183, E. J. Longyear Co., Agent, (San Mateo Dome Project) McKinley County, New Mexico - Operator's Monthly Progress Report for the month of August 1958

Enclosed are the original and four copies each of Forms MP-154 and MP-154A, Operator's Narrative Report, and Engineer's Report for the above period.

The work is being performed partly under independent subcontract, and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

Except as otherwise indicated below, we consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended on the following basis contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Miscellaneous, Logging Crew Standby Time

The Operator has reported the cost of 4 hours travel time for the logging crew, under "Logging Crew Standby Time." The contract does not provide for travel time, therefore the reported cost for logging crew travel time is to be disallowed as follows:

Reported cost, 6 hours Standby time at $10.00 per hour	$60.00
Allowable cost 2 hours actual Standby time at $10.00 per hour	20.00
Amount to be disallowed	$40.00

Disallowance, Self Potential Probing

The Operator has failed to report 95 feet of drilling for the period; therefore, self potential probing for 95 feet of unreported drilling is to be disallowed as follows:

Disallow, reported cost for 95 feet self potential probing at $0.15 per foot-----$1.42

Total amount to be disallowed---------- $ 41.42

Reconciliation with Amount Reported by the Operator on Form MF-104 for the month of August, 1958

Amount reported on Form MF-104 for August, 1958----------	$24,753.36
Amount to be disallowed----------	41.42
Acceptable cost for August, 1958----------	$24,711.94
Government participation at 75 percent----------	$18,533.96

Remarks:

Date of Report----------	September 2, 1958
Date Received in Field Office----------	September 8, 1958
Date Received in Region Office----------	September 15, 1958

Original signed by
E. N. HARSHMAN
E. N. Harshman

Enclosures

JBC:hmh

cc: Chmn. Op.Comm. (2)
Romslo, GMK/Tuc.
MF-104 file, Reg. III
Harshman
Emerick
Cooper
Chron
} w/copy Engr's Report

DMEA
DEPARTMENT OF THE INTERIOR

SEP 15 1958

REGION III
DENVER, COLORADO

September 10, 1958

Memorandum

To: J. W. Townsend, Alternate Acting Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject: Progress Report for August 1958, Docket DMEA-4842 (Uranium) Contract Idm-E1183, E. J. Longyear Co., R presentative (San Mateo Dome Project) McKinley County, N. Mex.

Enclosed are the original and 4 copies of each the subject report and the operator's report that comprises a narrative section, a location map, a section through drill holes, and geologic and radioactric logs of holes. Also enclosed are the original invoices covering both the drilling and the logging, and 4 extra copies of subject report.

The inspection of the exploratory project of captioned contract was made by me September 3 and 4, 1958 in the company of B. F. Sorenson, Project Engineer. Maps, sections and logs were reviewed at the company's office in Grants before field work that included an inspection of core and cuttings from the hole completed and in progress during the report period.

The following are the pertinent findings of the inspection:

1. Six holes, G-6-4, G-7-3, G-8-3, G-10-27, G-11-34 and G-12-27, were completed during the report period for a total of 12,335 feet of drilling. All of these holes were drilled in accordance with the contract except G-8-3 that was bottomed at 2,295 feet or 95 feet below the specified maximum of 2,200 feet.

CC Alternate Act. Exec. Off.(Orig. & 3)
DMEA-4842
DF

TMRomslo:frj

2. Holes G-9-27 and G-13-27, the last of the 13 holes of Stage I, were being drilled.

3. All completed holes had been both geologically and radiometrically logged.

4. No zones of above background radioactivity were encountered in the completed holes.

5. Mr. Sorensen continues to supervise the project in an excellent manner and apparently devotes full time to the work.

ANALYSIS OF THE OPERATOR'S REPORT

Form MF-104

Drilling - The $20,790.00 is the cost of the 12,240 feet of authorized drilling in the 6 completed holes. Per foot costs are as specified by the contract and include $1.50 for the initial 1,500 feet in each hole or 9,000 feet and $2.25 for the remaining 3,240 feet. Hole G-8-3 that was drilled to 2,295 feet was the only one bottomed below the specified maximum of 2,200 feet. The project engineer has satisfactorily explained why the hole was drilled deeper than necessary and has not included in the voucher the cost of the 95 feet of excessive drilling.

Original invoices covering the costs of drilling, probing, bulldozing and stand-by time are attached to original copy of the report.

Bulldozing - The $285.00 is for 19 hours spent in preparing drill sites and access roads with an RD-6 tractor-dozer at the specified rate of $15.00 per hour.

Probing - The approved cost of probing is $1,376.24. It includes $1,224.00 for 12,240 feet of Gamma-R logging at 10 cents a foot and $152.24 for 10,149 feet of S. P. logging at 1½ cents a foot. The difference between the vouchered $1,377.66 and the approved $1,376.24 is $1.42, the cost of the S. P. logging of the 95 feet of excessive footage in hole G-8-3.

Stand-by Time - The approved cost for stand-by time is $57.50 or $40.00 less than the vouchered $97.50. Of the approved cost of $57.50, $37.50 is for the drilling standby time of 1 hour at hole G-10-27 and 1.5 hours at hole G-12-27, or 2.5 hours at $15.00 per hour. The remaining approved cost of $20.00 is for 2 hours of logging standby time at $10.00 an hour. The disapproved $40.00 probably represents 4 hours of the 7.5 hours of drive time that was charged by the logging contractor. Drive time, time consumed on round trips from Grants, N. Mex., is not considered as standby time and therefore has been disallowed.

Incidental Allowance - The $2,203.20 is the additional allowable cost of drilling the 12,288 feet of hole at 18 cents a foot.

Totals - The $34,753.36, $34,172.24 and $48,925.60 appear to be correct before the disallowed $0.81 for probing during July and the presently disapproved $1.42 for probing and $40.00 for standby time.

Form MF-104A

The form has been correctly completed except that the August costs of non-core drilling from 1,500 to 2,200 feet should be $7,290.00 instead of the reported $2,290.00.

Narrative Report

The narrative report with map, sections, and geologic and radiometric logs is presented in an excellent manner.

Original signed by
E. E. Rosato

T. M. Rosato

COPY

Grants, New Mexico
September 2, 1958

DMEA
DEPARTMENT OF THE INTERIOR
SEP 15 1958
REGION III
DENVER, COLORADO

United States Department of the Interior
Defense Minerals Exploration Administration
234 New Customhouse
Denver 2, Colorado

Attention: E. H. Marshburn, Acting Executive Officer
DMEA Field Team, Region III

RE: Docket No. DMEA 4041 (Uranium)
Contract Idm-81183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Enclosed are the original and four copies of "Operators Unit Cost and Progress Report" covering work completed during August, 1958, on the San Mateo Dome Project under Docket No. DMEA 4041.

The original Report is supported by original of certified documentation of expenses.

We would appreciate having the check for reimbursement sent to our Denver Office.

Very truly yours,

E. J. LONGYEAR COMPANY

B. F. Swanson
B. F. Swanson
Project Engineer

Encl.

DMEA
DEPARTMENT OF THE INTERIOR
SEP 15 1958
REGION III
DENVER, COLORADO

COPY

Grants, New Mexico
September 2, 1958

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. H. Herrmann, Acting Executive Officer
DMEA Field Team, Region III

Progress Report No. 4 (August, 1958) RE: Docket No. DMEA 4052 (Uranium)
Contract Idm-K1183
San Mateo Dome Project
R. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Drilling during August was on a two rig basis. During the period August 1 to 10 one rig worked one 12 hour shift per day, then on August 11 went on a two shift per day basis of eight hours per shift. The other rig worked the entire month on a two shift per day basis, each shift being for eight hours. Progress for the month shows Holes G-6-4 and G-7-3 completed, Holes G-8-3, G-10-27, G-11-34 and G-12-27 started and completed, and Hole G-9-27 started. Hole G-9-27 is being cored through the Westwater member of the Morrison formation.

Probing results in the completed holes show no above background radioactivity, and all holes completed to date (11) are considered barren.

At the present rate of progress it is anticipated that Stage I drilling will be completed early in September. Stage III drilling will start during the first week of September and should be completed by November 1, 1958.

Drilling (See attached Map for hole locations)

Two rigs were in operation throughout the month on a schedule of 10 straight days on and 4 days off. Drill crews worked 23 days during the month, and were off 8 days. Footage drilled was 12,335 feet in 6 completed holes, and 1745 feet in another hole as yet incomplete. Average feet drilled per calendar day was 434, or 227 feet per day per rig. Of the total footage drilled during the month, only 12,260 is submitted to DMEA for reimbursement.

COPY

U. S. Dept. of the Interior (BRRA) September 2, 1958

Hole G-6-4- Started July 31. Bottomed on August 7 at 2050 feet after penetrating the Receptacle approximately 36 feet. Circulation was lost at approximately 1800 feet and was not regained thereafter upon completion of the hole. Time for completion was 8 days, of which 2 days were lost because of mechanical troubles. Average feet of advance per calendar day was 256.

Hole G-7-3- Started July 31. Bottomed on August 13 at a depth of 2070 feet. The Receptacle was penetrated approximately 10 feet (See Probing). A total of 2070 feet was drilled in 14 days for an average of 148 feet per calendar day. The drill crews did not work during the period August 7-10.

Hole G-8-3- Started August 11. Bottomed on August 16 at a depth of 2295 feet after penetrating the Receptacle approximately 35 feet (see probing results). The hole was completed in 6 days for an average advance of 382 feet per calendar day.

Hole G-9-37- Started August 20. Present depth is 1745 feet. The hole will be cored through the Westwater, starting at approximately 1650 feet. It is expected that the hole will bottom early in September.

Hole G-10-37- Started August 12. Bottomed August 19 at a depth of 1930 feet after penetrating the Receptacle approximately 82 feet (see probing results). The hole was completed in 8 days for an average advance of 364 feet per calendar day. One day was lost because of a mechanical breakdown.

Hole G-11-34- Started August 17. Bottomed on August 25 at a depth of 1880 feet. The Receptacle was penetrated approximately 40 feet (see probing results). The hole was completed in 9 days for an average advance of 208 feet per calendar day. The drill crews did not work during the period August 21-24.

Hole G-12-37- Started August 26. Bottomed August 31 after penetrating the Receptacle approximately 63 feet. Average advance per calendar day was 330 feet.

Sampling (See attached lithologic logs)

Rock and/or sludge samples were collected from every 10 feet of hole drilled. The samples were logged by a geologist and those through the Westwater were checked for radioactivity with a geiger counter. None of the samples showed showed radioactivity above background. Samples through the Westwater were sacked and saved for study by the Government.

Contacts cannot be definitely determined from samples because of contamination. Therefore, there exists some descrepancies between contacts picked from a study of the sludge samples and those picked from the geophysical logs. This difference is not great; however, contacts used as reference points are taken from geophysical logs because of their greater accuracy. In all holes drilled sludge samples indicated that the Receptacle had been penetrated at least 20 feet.

COPY

Probing (See attached Electric logs and Cross-sections)

Hole G-4-4- Probed to 2034 feet on August 7. No above background radioactivity was recorded and the hole is considered barren. The Westwater is thought to extend from 1862 feet to 2014 feet. A sand interval from 1862 feet to 1902 feet could be the Poison Canyon sand; however, it is included as part of the Westwater.

Hole G-7-3- Probed to 2081 feet on August 13. No above background radioactivity was recorded and the hole is considered barren. The Westwater sand extends from 1997 to 2070 feet. Drilling records show the hole to be drilled to only 2070 feet; however, probing shows the hole to be at least 2081 feet deep. The Recapture is indicated at 2070 feet. The Westwater sand extends from 1997 feet to 2070 feet, being only 73 feet thick. Cross-section No. 1, a east-west section through Holes G-3-4, G-5-4, G-6-4, SM 15-3, G-7-3, and G-8-3 indicates faulting between Holes SM 15-3 and G-7-3, which may account for the thinning of the Westwater. It can also be seen from the cross-section that formations fall off rapidly to the east in section 3, and that the holes drilled in section 3 are on the SE flank of the San Mateo Dome. In view of the structure indicated by the cross-section, it is felt that any more drilling in the area east of the section line between section 3 and section 4 is not warranted.

Hole G-8-3- Probed to 2295 feet on August 16. No above background radioactivity was recorded and the hole is considered barren. The Westwater is thought to extend from 2126 to 2240 feet. A sand interval between 2126 and 2148 feet could be the Poison Canyon sand; however, it is included as part of the Westwater. Because sludge samples did not indicated that the Recapture was penetrated, the hole was drilled to 2295 feet. It was not known until after the hole was logged by geophysical methods that an excess of Recapture had been drilled. In view of this, only the footage to 2200 feet was submitted to DMEA for reimbursement.

Hole G-10-27- Probed to 1950 feet on August 20. No above background radioactivity was recorded and the hole is considered barren. No Poison Canyon sand is indicated. The Westwater is thought to extend from 1760 to 1888 feet. An excess of Recapture was drilled because sludge samples indicated that the Recapture had been penetrated at 1920 feet. It is thought that the contact is gradational and not an abrupt change from sand to shale.

Hole G-11-34- Probed to 1875 feet on August 25. No above background radioactivity was noted and the hole is considered barren. The Westwater extends from 1700 feet to 1838 feet. A sandstone bed exists between 1657 and 1678 feet that could be the Poison Canyon sand; however, it is separated from the main body of the Westwater by 21 feet of shale and is included as part of the Brushy Basin member.

Hole G-12-27- Probed to 2090 feet on August 31. No above background radioactivity was recorded and the hole is considered barren. The Westwater extends from 1896 to 2027 feet. A sandstone bed exists between 1854 and 1874 feet that could be the Poison Canyon sand; however, it is separated from the main body of the Westwater by 22 feet of shale and is included as part of the Brushy Basin member.

COPY

Note: Because only the formations below the Dakota are thought to be important as uranium host rocks in this area, only the original of this Report is supported by a geophysical log of the entire footage by each drill hole. Only the footage below the Dakota appears on the logs supporting the four copies of the Report. However, if it is thought necessary, copies of the entire logs can be had upon request.

General

In as much as Stage 1 drilling will be completed early in September it might be mentioned here that following the completion of Stage 1 drilling a request will be made to BMEA for permission to carry out Stage II drilling.

Because of previous commitments, other than BMEA, that have imposed a heavy work load on this Office for September, it is anticipated that the above mentioned request will not be submitted until early October.

Drilling and Related Costs (For Month of August, 1958)

Actual Costs (Stage 1)

Category (1) Independent Contracts	Cost to MMC	Cost submitted to BMEA
9,000 feet of non-core drilling 0 - 1,500 ft. depths, @ $1.50/ft.	13,500.00	13,500.00
3,335 feet non-core drilling 1,500 - 2,200 ft. depths, @ $2.25/ft.	7,501.75	7,200.00
2.5 hrs. drill crew standby time @ $15.00/hr.	37.50	37.50
12,335 feet probing and logging @ $0.112/ft.	1,386.16	1,377.44
9.5 hrs. logging and standby time @ $10.00/hr.	95.00	60.00
Cost of lost circulation material in excess of $100.00 per hole	------	------
19 hrs. bulldozing @ $15.00/hr.	285.00	285.00
Fixed Unit Costs		
Incidental Allowance for each foot of hole drilled, 12,335 feet @ $0.18/ft.	2,220.30	2,283.20
2% New Mexico School Tax	426.53	------
Grand Total:	$25,456.24	$24,753.34

COPY

Total expenditures submitted to DMEA for August, 1958:	$24,753.36
Government participation @ 75%:	$18,565.02

E. J. LONGYEAR COMPANY

B. F. Sorensen
Project Engineer

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED AUG 25 1958 D.M.E.A.

Month of July, 1958 Docket No. DMEA 4842 Contract No. [illegible]-1183
Operator's Name E. J. Longyear Company, Agent, San Mateo Dome Project Mineral Uranium
Address Box 998, Grants, New Mexico
Contract Amount, $175,770.00 Government Participation 75% & [illegible] Amount, $114,235.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:			STAGE I			
Drilling	13,792.50	7,042.00	20,834.50			
Bulldozing	135.00	15.00	150.00			
Circulation Material	80.00	2.00	82.00			
Crosscutting						
Probing	935.75	203.40	1,139.15			
Drifting						
Standby Time	66.00		66.00			
(2) Labor and Supervision:						
Incidental Allowance	1,163.40	366.12	1,529.52			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes		11.07	11.07			
(8) Contingencies (specify):						
TOTALS	16,472.65	7,699.59	24,172.24	16471.84	7699.59	24,171.43

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

Date Aug. 5, 1958 *Payee E. J. Longyear Company

Per V. Sorensen Title Project Engineer

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

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 12,353.88

Signature [illegible]
(Authorized Certifying Officer)

Date 8/20/58 Vou. No. DMEA 59-22

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Fdm-E1183 in accordance with the terms of the contract.

Signature T M Ramsle Title Mining Engineer Date 8/12/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature J W Sammond Title Alternate acting Executive Officer Date AUG 19 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1958 Docket No. DMEA 4842 Contract No. IM-E1183
Operator's Name E. J. Longyear Co., Agent, San Mateo Ford Project Minerals Uranium
Address Box 997, Grants, New Mexico

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising				STAGE I				
~~Shafts~~ Drill Crew Standby Hr.		30.00	2	30.00	2	15.00	13	15.00
~~Winzes~~ Logging Crew Stand Hr.		36.00	3.6	36.00	3.6	10.00	13	10.00
~~Drilling~~: Core	by Ft.			4,342.00	334	13.00	700	13.00
Non-Core 0-1500	Feet	9,000.00	6000	11,250.00	7,500	1.50	60,000	1.50
Non-Core 1500-2200	Feet	4,792.50	2130	5,242.50	2,330	2.25	21,700	2.25
~~Stripping~~ Circulation Material		82.00	2	82.00	2.05	40.00	13	40.00
~~Trenching~~ Probing	Feet	935.75	8137	1,139.15	10,171	0.112	82,400	0.115
~~Test Pits~~ Core Boxes	Boxes			41.07	35	1.17	70	1.25
~~Roads and Trails~~ Bulldozing	Hour	135.00	9	180.00	12	15.00	40	15.00
Incidental Allowance	Feet	1,463.40	8130	1,829.52	10,164	0.18	82,400	0.18
TOTAL DISTRIBUTED COSTS		16,472.65		21,172.24				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		16,472.65		21,172.24				170,770.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Aug. 5, 1958 Operator E. J. Longyear Company

Per B. F. Sorensen Title Project Engineer
B. F. Sorensen

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: On probings: The units to date do not match the drilling units; however it is known that the probing measurements are more correct; therefore, the amount billed by the logging company is herewith submitted. However, it is understood that only a certain number of units are authorized and when this amount is reached no more will be submitted.

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." . The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

LAW OFFICE COPY
DMEA
RECEIVED AUG 25 1958

DATE	INITIALS	CODE
8/26	Com	100
		800

FINAL DISTRIBUTION MADE AUG 21 1958

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

Administrative Audit Difference Statement

[redacted]

Date: [redacted]
Payee's Reference: [redacted]

[redacted]

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ [redacted]

Difference $ [redacted]

Amount Approved $ [redacted]

The reason for the difference was due to:

[redacted]

[redacted]

[redacted]

[redacted]

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-III-B & F Form No. 4
4-15-52 D

224 New Customhouse
Denver 2, Colorado

August 19, 1958

Memorandum

To: T. A. Christensen

From: Alternate Acting Executive Officer, DMEA Field Team, Reg. III

Subject: Docket DMEA 4842 (Uranium) Contract Idm-E1183, K. J. Longyear Company, Agent (San Mateo Dome Project) McKinley County, New Mexico - Operator's Monthly Progress Report for the month of July 1958

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

The work is being performed partly under independent subcontract and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Bids were not submitted for bulldozer work; however, the bulldozing rates are in line with the standard rates prevailing in the project locality for the size and make of bulldozer used on the project. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

Owing to the gradational character of the Westwater-Recapture contact, it is not possible for the Operator to determine the contact by visual examination of the drill cuttings, (note engineer's comments and attached excerpt from geological interim inspection report). Therefore, the DMEA engineer and geologist concur that some excess drilling is unavoidable. Under the circumstances, it is administratively determined that the drilling is in conformance with the intent of the contract.

Concerning the engineer's comments on Circulation Materials, the contract allows a maximum of $40.00 per hole for circulating material costs in excess of $100.00; therefore, the Operator has properly reported the costs for this item of work.

Concerning the engineer's comments on Probing, the Government will not pay for probing footage in excess of the drilling footage invoiced by the drilling subcontractor.

Except for the following, we consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for July 1958, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Disallow

Excess costs for 7 feet of probing at $0.115 per foot ------- $0.81

Reconciliation with Amount Reported by the Operator on Form MF-104 for July 1958

Amount reported on Form MF-104 for July 1958 ----------	$16,472.65
Amount to be disallowed ----------	.81
Acceptable cost for July 1958 ----------	$16,471.84
Government participation at 75 percent ----------	$12,353.88

REMARKS:

Date of Report ----------	August 5, 1958
Date Received in Field Office ----------	August 11, 1958
Date Received in Region Office ----------	August 14, 1958

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosures

MEM:jy

cc: Chm. Op. Comm. (2)
DMEA, XXI
MF-104 File, Reg. XXI
Hardman
Kuprisk
Cooper
Chown
} w/copy of Engr's Report

DMEA
DEPARTMENT OF THE INTERIOR

AUG 14 1958
REGION III
DENVER, COLORADO

August 12, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Arizona

Subject: Progress Report for July 1958, Docket DMEA-4942 (Uranium) Contract Min-E1183, E. J. Longyear Co., Representative, (Sam Mateo Dome Project) McKinley County, N. Mex.

Enclosed are the original and 4 copies of each the subject report and the Operator's report that comprises a narrative section, Forms MF-104 and 104A, a map, geologic and radiometric logs for holes G-2-4, G-3-4, G-4-4, and G-5-4, and original invoices covering both the drilling and radiometric logging. Also enclosed are 4 extra copies of subject report.

The exploratory project of subject contract was inspected by me August 5, 1958 in the company of W. L. Emerick, geologist U. S. Geological Survey and B. F. Sorensen, project engineer. The field inspection included a visit to the sites of the 4 holes completed during the report period and to the 2 holes being drilled, and an inspection of sludges both of the drilling sites and a sample storage building.

The inspection of the sludges indicates rather conclusively that formational contacts cannot be definitely determined due to contamination of the samples. Furthermore, the gradational character of the Westwater-Recapture contact precludes it being pin-pointed by geophysical logs. Consequently, as stated by Mr. Sorensen in the narrative section of his report, a discrepancy is bound to exist between the contacts picked by the 2 methods.

No zones of significant radioactivity were encountered in the 4 holes completed during the report period.

Mr. Sorensen, continues to supervise the project in a creditable manner and apparently devotes full time to the job.

CC Executive Officer (Orig. & 8)
DMEA-4942
DF

TMRomslo:fr

ANALYSIS OF THE OPERATOR'S REPORT

Form MF-104

Drilling - The total for July, $13,792.50, is the cost of the 8,130 feet of authorized non-core drilling in completed holes Nos. G-2-4, G-3-4, G-4-4 and G-5-4. Per foot costs that are as specified include $1.50 for the initial 1,500 feet in each hole or 6,000 feet and $2.25 for the remaining 2,130 feet.

The holes appear to have been drilled, logged and tested for radioactivity in accordance with the contract. Furthermore, the geologic logs that Mr. Emerick and I believe are based on acceptable interpretations under the prevailing conditions, indicate the holes have been bottomed as specified at depths not exceeding 20 feet below the Westwater-Recapture contact. At my request, Mr. Emerick will confirm the findings on this problem in a memorandum to E. N. Harshman.

Original invoices covering the drilling cost and the costs for bulldozing, circulation material, probing, and stand-by time are attached to the original report.

Bulldozing - The $135.00 is for 9 hours of authorized work spent in preparing drill sites and access roads with an RD-6 tractor-dozer at the specified rate of $15.00 per hour .

Circulation Materials - The actual cost of circulation material used is $146.70 for hole G-3-4 and $549.40 for hole G-4-4, a total of $696.10. In my opinion the allowable cost is $496.10 after deducting the specified $100.00 for each hole. This opinion is based on the belief that the total allowable cost of $540.00 is chargeable against 1 or more holes. However, the operator feels that the maximum allowed is the vouchered $80.00, $40.00 for each of the 2 holes. If my interpretation is correct, I suggest that you notify the operator that he may claim the balance and instruct him as to the proper procedure.

Probing - The $935.75 is cost of probing 8,137 feet in the 4 completed holes at the specified cost of 11½ cents per foot. The probed depth exceeds the reported drilled depth by 7 feet. As probing measurements probably are more accurate than those used in drilling, participation in the cost of the 7 feet is recommended.

Stand-by time - The $66.00 is for the drillers charge of 1 hour each at holes G-2-4 and G-5-4 at the specified rate of $15.00 per hour plus the prober's charge of 1 hour for hole G-2-4 and 2.6 hours for the other 3 holes at the specified rate of $10.00 per hour.

Incidental Allowance - The $1,463.40 is the additional allowable cost of drilling the 8,130 feet at 18 cents per foot.

Totals - The total costs, $16,472.65, $7,699.59 and $24,172.24, appear to be correct.

Form MF-104-A

The form has been properly completed.

Narrative Report

The narrative report with map and geologic and radiometric logs is considered acceptable.

Original signed by
T. M. Romslo

T. M. Romslo

(Excerpt from Interim Inspection Report of
August 12, 1958, by W. L. Emerick, USGS, on
Contract Ind-[illegible], Report [illegible] A[illegible]2, E. J.
Longyear Company (San Mateo Dome Project)
McKinley County, Arizona)

"Drill hole cuttings were inspected at the drill sites of the completed and currently drilling holes. All of the completed holes were carried through the Westwater Canyon member of the Morrison formation into the Recapture shale member. All of the sludge samples below the overlying Mancos shale were contaminated by large proportions (probably even as high as 95 percent) of the Mancos, and visual determination of contacts below the Mancos shale could not be made definitely. The contaminated condition is further confused by the fact that the Brushy Basin, Westwater Canyon and Recapture members of the Morrison formation interfinger. This Operator and others have found that electrical logging methods give more accurate results in placing contacts between the formations.

"Under the existing unavoidable circumstances it would be extremely difficult for the Operator to definitely pick contacts during the drilling of a hole, or to definitely know when he was 20 or 50 feet into the Recapture member. The drilling is being performed diligently and efficiently, and I concur with Mr. Ruzalo's opinion that excess footage in the holes is unavoidable under the circumstances."

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 0-1941

August 6, 1958

United States Dept. of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Marshman, Acting Executive officer
DMEA Field Team, Region III

RE: Docket No. DMEA 4842 (Uranium)
Contract 1 dm-E 1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
Mc Kinley County, New Mexico

Gentlemen:

Enclosed are the original and four copies of "Operators Unit Cost and Progress Report" covering work completed during July, 1958, on the San Mateo Dome Project under Docket No. DMEA 4842.

The original Report is supported by original or certified documentation of expenses.

We would appreciate having the check for reimbursement sent to our Denver Office.

Very truly yours,

E. J. LONGYEAR COMPANY

B. F. Sorensen
Project Engineer

Encl.

Grants, New Mexico
August 6, 1958

United States Dept. of the Interior
Defense Minerals Exploration Adm.
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting Executive Officer
DMEA Field Team, Region III

Progress Report No. 3 (July, 1958) RE: Docket No. DMEA 4842 (Uranium)
Contract Idm - E 1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
Mc Kinley County, New Mexico

COPY

Gentlemen:

On July 1, 1958 a second drill rig was put in the field and drilling has since been on a two rig basis. During the month, Hole G-2-4, which was started during June, was completed, Holes G-3-4, G-4-4, and G-5-4 were started and completed, and Holes G-6-4 and G-7-3 were started.

Probing results in the completed holes show no above background radioactivity and all holes completed to date are considered barren.

At the present rate of progress it is anticipated that Stage 1 drilling will be 85% complete by September 1, 1958.

Drilling (See attached map for hole locations)

Drilling thru July 26 was on a two rig basis of one 12 hour shift per day for each rig. On July 28 one rig was put on a 2-shift per day basis, each shift being for 8 hours. Crews on each rig maintained a working schedule throughout the month of 10 straight days on and 4 days off.

Rig breakdown and lost curculation problems resulted in several lost drilling days. A breakdown of time for the month shows: each rig drilling only 16 days, an average of 7 days lost per rig because of lost circulation and breakdowns, and each rig crew off 8 days. Drilling progress per calendar day was 207 feet or 1[illegible]3 feet per rig.

United States Dept. of the Interior

No. 2

Hole G-2-4 - Started June 16. Bottomed July 3 at 2020 feet after penetrating the Recapture approximately 20 feet. The hole was completed in 18 days at a rate of 112 feet per calendar day. A cone from the drill bit was lodged in the hole on June 24 and 4 days were lost fishing it out.

Hole G-3-4 - Started July 1. Completed July 17 at a depth of 2030 feet. Approximately 50 feet of the Recapture was penetrated. Drilling time averaged 113 feet per calendar day. Lost circulation trouble resulted in 5 lost drilling days, and the drillers were off 4 days.

Hole G-4-4 - Started on July 4. A depth of 860 feet was reached on July 7, at which time circulation was lost. The hole was cemented and re-drilled to 350 feet on July 9. Drill rig mechanical failure resulted in 4 lost days during which time the hole became inaccessible and on July 18 the hole was re-started. The hole was completed July 31 at 2020 feet after penetrating the Recapture approximately 20-40 feet. On July 28, two shifts were started to better control lost circulation. Each shift worked 8 hours, making each working day 16 hours long. Total feet drilled to complete the hole were 3240 feet in 28 days. During this time 8 days were not worked, 4 days were lost because of mechanical failures, and 3 days lost because of lost circulation. Drilling time for the completed hole averaged 72 feet per calendar day.

Hole G-5-4 - Started July 19. Completed on July 31 at a depth of 2060 feet. The Recapture was penetrated approximately 50 feet. The hole was completed in 13 calendar days for an average of 158 feet per day. The drill crew did not work during the period July 24 - 27.

Hole G-6-4 - Started July 31. Present depth 1600 feet.

Hole G-7-3 - Started July 31. Present depth 1200 feet.

Probing (See attached hole cross-sections)

Hole G-2-4 - Probed July 3, 1958 to a depth of 2020 feet. No above background radioactivity was recorded and the hole is considered barren. A sand interval from 1800 feet to 1850 feet could possibly be the Poison Canyon sand; however, it is grouped with the Westwater, which extends to 1999 feet. Shale breacks occur at 1850 feet and 1915 feet.

Hole G-3-4 - Probed to 2027 feet on July 17. Radioactivity of double background magnitude was recorded at 1828 feet in what is believed to be the Poison Canyon sand; however, the count is not thought to be high enough to indicate mineralization, and the hole is considered barren.

The Westwater member is 162 feet thick, beginning at 1816 feet.

COPY

The first 25 feet, referred to above, is thought to be the Poison Canyon sand. This sand is separated from the main body of the Westwater by a 13 foot shale zone. Other shale breaks occur at 1910 and 1942 feet. The Recapture shale and mudstone beds could not be recognized in the sludge samples; however, the geophysical log shows a definite contact at 1978 feet.

Hole G-4-4 - Probed to 2025 feet on July 31. No above background radioactivity was recorded and the hole is considered barren. The Westwater member is over 150 feet thick, beginning at 1828 feet. The Westwater - Recapture contact is gradational and cannot be definitely determined; however, it is thought to be between 1980 and 2011 feet. The electrical log shows the hole to be 2025 feet deep (drilled depth was recorded as 2020 feet). No Poison Canyon sand could be recognized.

Hole G-5-4 - Probed to 2073 feet on July 31. No above background radioactivity was recorded and the hole is considered barren. The Westwater sand is at 1885 feet and extends to approximately 2020 feet. The Westwater - Recapture contact cannot be definitely determined. Shale breaks occur in the Westwater at 1895, 1915, and 1965 feet. It is possible the Poison Canyon sand exists between 1885 feet and 1916 feet, but this can only be surmised.

Note:

Because only the formations below the Dakota are thought to be important as uranium host rocks, only the original of this Report is supported by a geophysical log of the entire footage in each drill hole. Only the footage below the Dakota appears on the geophysical logs supporting the four copies of the Report. However, if it is thought necessary, copies of the entire logs can be submitted with each copy of the Report.

Sampling (See attached lithologic logs)

Dust and/ or sludge samples were collected from every 10 feet of hole drilled. The samples were logged by a geologist and those through the Westwater were checked for radioactivity with a geiger counter. None of the samples checked showed any radioactivity above background. Samples through the Westwater were sacked and saved for study by the Government.

Contacts cannot be definitely determined from the samples because of contamination. Therefore, there exists some discrepancies between contacts picked from a study of the sludge samples and those picked from the geophysical logs. This difference is not great; however, contacts used as reference points are taken from geophysical logs because of their greater accuracy.

COPY

United States Dept. of the Interior

No. 4

Drilling and Related Costs (For Month of July, 1958)

Actual Costs (Stage 1)

Category (1) Independent Contracts	Cost to SMDP	Cost submitted to DMEA
6,000 feet of non-core drilling 0 - 1,500 ft. depths, @ $1.50/ft.	$9,000.00	$9,000.00
2,130 feet non-core drilling 1,500 - 2,200 ft. depths, @ $2.25/ft.	4,792.50	4,792.50
2 hrs. drill crew standby time @ $15.00/hr.	30.00	30.00
8,137 feet probing and logging @ $0.115/ft.	935.75	935.75
5.6 hrs. logging & standby time @ $10.00/hr.	56.00	36.00
Cost of lost circulation material in excess of $100.00 per hole	496.10	80.00
10 hrs. bulldozing @ $15.00/hr.	150.00	135.00
Fixed Unit Costs		
Incidental Allowance for each foot of hole drilled, 8,130 feet @ $0.18/ft.	1,463.40	1,463.40
2% New Mexico School Tax	280.75	
Grand Total:	$17,204.50	$16,472.65

Total expenditure submitted to DMEA for July, 1958 $16,472.65

Government participation @ 75% $12,354.49

E.J. LONGYEAR COMPANY

B. F. Sorensen

B. F. Sorensen
Project Engineer

COPY

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED AUG 6 1958 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1958 Docket No. DMEA 4842 Contract No. IDM-21183
Operator's Name E.J.Longyear Co.,Agent,San Mateo Dome Pro- Minerals Uranium
Address 416 Colorado Bldg.,Denver, Colo. (ject
Contract Amount, $ 176,770.00 Government Participation: 75%&50% Amount, $ 114,235.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	STAGE I					
Drilling	7042.00					
Bulldozing	45.00					
Circulation Material	2.00					
~~Crosscutting~~						
~~Drifting~~ Probing	203.40					
Incidental Allowance	366.12					
(2) ~~Labor and Supervision~~						
~~Labor~~						
~~Supervision~~						
~~Technical Services~~						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes	41.07					
(8) Contingencies (specify):						
TOTALS	7699.59			7,699.59		7,699.59

I certify that the above bill is correct and just and that payment therefor has not been received.
Date July 2, 1958 Payee E. J. Longyear Company
Per B. F. Sorensen Title Project Engineer

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

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$5,774.69

Signature (Authorized Certifying Officer)

Date 8/1/58 Vou. No. DMEA 59-14

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Tdm-E1183 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 7/23/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Checked for Engineering Allowability

Signature [illegible] Title Alternate Acting Executive Officer Date JUL 31 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED AUG 6 1958 DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1958 Docket No. DMEA 4842 Contract No. IDM-E1103
Operator's Name E.J. Longyear Co., Agent, San Mateo Dome Project Minerals Uranium
Address 416 Colorado Bldg., Denver, Colorado

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising				STAGE I				
Shafts								
Winzes								
Drilling: Core 1700-2034	feet	4342.00	334	4,342.00	334	13.00	700	13.00
non-core Churn 0-1500	feet	2250.00	1500	2,250.00	1500	1.50	60,000	1.50
non-core Auger 1500-2200	feet	450.00	200	450.00	200	2.25	21,700	2.25
Circulation material		2.00	---	2.00	---	---	13	40.00
Stripping								
Trenching Probing	feet	203.40	2034	203.40	2034	0.115	82,400	0.115
Test Pits Core boxes	boxes	41.07	35	41.07	35	1.25	70	1.25
Roads and Trails	hr.	45.00	3	45.00	3	15.00	40	15.00
Incidental Allowance	feet	366.12	2034	366.12	2034	0.18	82,400	0.18
TOTAL DISTRIBUTED COSTS		$7699.59		7,699.59				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7699.59		7,699.59				176,770.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 2, 1958 Operator E.J. Longyear Company

Per B. F. Sorensen Title Project Engineer

B F Sorensen

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

FINAL DISTRIBUTION

MADE AUG 4 1958

		CODE
8/7	Com	100
		800

224 New Customhouse
Denver 2, Colorado
July 31, 1958

Memorandum

To: T. A. Christensen

From: Alternate Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4842 (Uranium) Contract Idm-E1183, E. J. Longyear Company, Agent, (San Mateo Dome Project) McKinley County, New Mexico - Operator's Monthly Progress Report for the month of June, 1958

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

The work is being performed partly under independent subcontract, and partly at fixed unit costs. The drilling rates are as low or lower than the rates contained in the lowest and best bid submitted with the application. Bids were not submitted for bulldozer work; however, the bulldozing rates are in line with the standard rates prevailing in the project locality for the size and make of bulldozer used on the project. Under the circumstances, the rates for the work performed under independent subcontract are considered to be reasonable.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for June, 1958, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

It is noted that the Unit Costs to Date for probing and core boxes entered on Form MF-104A are in error. The Unit Costs to Date for probing is $0.10, and for core boxes, $1.15.

Remarks: Date of Report----------July 2, 1958
Date Received in Field Office----------July 9, 1958
Date Received in Region Office----------July 25, 1958

Enclosures
MHM:hmh
cc: Chmn. Op. Comm (2)
DMEA/Tucson
MF-104 file, Reg.III
Harshman } w/copy of Engr's report
Emerick }
Chren

Original signed by
J. W. TOWNSEND
J. W. Townsend

DMEA
DEPARTMENT OF THE INTERIOR

JUL 25 1958

REGION III
DENVER, COLORADO

July 23, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject: Progress Report for May and June 1958, Docket DMEA-4842 (Uranium) Contract Ida-E1183, E. J. Longyear Co., Representative, (San Mateo Dome Project) McKinley County, N. Mex.

Enclosed are the original and 4 copies of each the captioned report and the Operator's report that contains a narrative section, Form MF-104 and 104A, a map, and a geologic log and a gamma ray, resistivity and self-potential log of drill hole No. G-1-33. Original or certified copies of invoices covering the purchase of core boxes and the cost of each drilling and the logging services are attached to the original of the Operator's report. Also enclosed are 4 extra copies of subject report.

The exploratory project of subject contract was inspected by me July 15, 1958 in the company of W. L. Emerick and J. W. Hasler, geologists, U. S. Geological Survey and B. F. Sorensen, project engineer. The inspection included a visit to the sites of drill holes Nos. G-1-33 and G-2-4, and inspection of core and sludges from hole G-1-33, the only hole completed during the report period. Information obtained during the inspection indicates that the work performed from the initiation of the project on May 13, 1958 to July 1, 1958 and the findings are as stated in the Operator's report.

CC Executive Officer (Orig. & 8)
DMEA-4842
DF

TMRomslo:fr

No above background radioactivity was encountered in hole G-1-33 nor in hole G-2-4 that reportedly was started June 16 and was completed July 3 at a depth of 2,020 feet. Hole G-2-4 had reached a depth of 1,780 on the day of the inspection. By the way, in numbering the holes the G stands for Government, the first figure is the number shown on the location map and the last figure is the section in which the hole is located.

Model 1500, Failing drill rigs are being used by the drilling contractor, Scott Bros., Albuquerque, N. Mex. Rotary holes are drilled to a diameter of 4-3/4 inches and cores obtained where specified are 2-15/16 inches in diameter.

Mr. Sorensen, the project engineer who is a geologist, is supervising the operations in a creditable manner. He apparently devotes full time to the project work.

ANALYSIS OF THE OPERATOR'S REPORT

Form MF - 104

Drilling -

The $7,042.00 is the cost of the authorized 2,034 feet of drilling in hole G-1-33 at the specified rates of $1.50 for non-core drilling from 0 to 1,500 feet, $2.25 a foot for non-core drilling from 1,500 to 1,700 feet, and $13.00 per foot for core drilling the remaining 334 feet.

The coring is considered to have been done in accordance with the contract as less than the maximum allowable 300 feet was done and it started at a depth that can be considered as approximating 1,650 feet.

Bulldozing -

The $45.00 is the cost of 3 hours spent in preparing the drill site and access road of hole G-1-33 with an RD-6 tractor-dozer at the specified rate of $15.00 per hour.

Circulation Material -

The $2.00 is the cost in excess of $100.00 for circulation material lost in drilling hole G-1-33. The cost of the circulation material is shown in the letter attached to Scott Bros. original invoice that documents the costs of drilling, bulldozing and allowable portion of the circulating material. The 2 percent New Mexico School Tax has not been included as it is not an allowable cost.

Probing -

The Century Geophysical Corporation probed hole G-1-33 and found that it is 2,040 feet deep, 6 feet more than recorded and charged for by the drilling contractor. The project engineer has made the reasonable assumption that the probed depth is correct and that the error of 6 feet can be accounted for by the drillers use of 20 feet for drill pipe that often is up to a few inches longer. However, the Operator has elected to absorb the cost of the 6 feet of probing and has charged the project $203.40 for the 2,034 feet at 10 cents a foot. The per foot cost of 10 cents as shown on the attached original invoice is less than the allowable 11.5 cents.

Incidental Allowance -

The $366.12 is an additional allowable cost of drilling the 2,034 feet in hole G-1-33 at the specified rate of $0.18 a foot.

Core Boxes -

The $41.07 represents the cost of 36 core boxes at $1.15 each plus the New Mexico 5 Mont Tax of 2 percent. It is documented by the attached 3 invoices, 2 from Industrial Mine Supply, Grants, N. Mex. and the other from the Exploration Drilling Supply & Repair Co., Albuquerque, N. Mex.

Totals -

The total cost of $7,699.59 is correct.

Form MF-104A

The form has been properly completed with the exception that the respective unit costs for Probing and Core boxes should be $0.10 and $1.17 in place of the reported $0.115 and $1.25.

Narrative Report

The narrative report with location map and 2 hole logs meet requirements in all respects.

Original signed by
T. M. Romslo

T. M. Romslo

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941

July 9, 1958

United States Dept. of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting ~~Executive~~ Officer
DMEA Field Team, Region III

RE: Docket No. DMEA 4842 (Uranium)
Contract Idm-E1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Enclosed are the original and four copies of "Operators Unit Cost and Progress Report" covering work completed during June, 1958, on the San Mateo Dome Project under Docket No. DMEA 4842.

The original Report is supported by original or certified documentation of expense.

We would appreciate having the check for reimbursement sent to our Denver Office.

Very truly yours,

E. J. LONGYEAR COMPANY

B. F. Sorensen

B. F. Sorensen
Project Engineer

Encl.

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941

July 5, 1958

United States Dept. of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting Executive Officer
DMEA Field Team, Region III

Progress Report No. 2 - RE: Docket No. DMEA 4842 (Uranium)
Contract Idm-E1183
San Mateo Dome Project
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Since drilling started on May 13 under subject contract one hole has been completed and the results evaluated. The following is a report on the work performed, conditions encountered, and results obtained. Another hole has been started and is scheduled for completion the first week of July.

Drilling (See attached map for hole locations)

As reported in Progress Report No. 1 submitted to DMEA June 5, 1958, drilling started May 13 with one rig operating. Work was on a one-shift basis of 12 hours each day. The drill crews worked a schedule of 10 straight days on and 4 days off.

Hole G-1-33 - Started May 13 and bottomed June 10 at a depth of 2034 feet. On May 25 the hole was at 1700 feet and coring was started. At 1760 the hole gave indications of caving when left idle overnight. As a precaution against this a 12-hour night shift was started and after June 2, drilling was on a 24-hour per day basis.

On June 8, a depth of 2027 feet was reached and the core showed that the last 5 feet of the hole were in what we

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believe to be the Recapture shale. It was decided that one more run would be made to confirm that the Recapture had been penetrated. On the last run, drilling was very hard and advance was slow, indicating that the Recapture shale was being drilled. After 7 feet were cored the driller reported that he thought the bit was blocked and that he was going to pull the rods from the hole. On coming out of the hole the driller found that a rod had twisted off at 1690 feet and 344 feet of rods were still on the bottom of the hole. Fishing operations were started and the broken rods were caught with an overshot tool; however, the rods were stuck and could not be moved. At this point a request was made, in writing, to DMEA to consider the hole as completed even though a geophysical log had not been run on the hole. However, fishing operations continued and on June 10 the stuck rods were removed and the hole was probed.

The hole penetrated the Recapture member of the Morrison formation approximately 12 feet. The hole was cored from 1700 feet to 2034 feet. Core recovery was 89%. All of the Westwater was cored and recovery through the Westwater was 95%.

Hole G-2-4 - Started June 16. Reached a depth of 1610 feet on June 24, at which time a cone broke off the drilling bit and lodged in the bottom of the hole. Fishing tools were put into the hole and the cone was fished out on June 28. It is expected that the hole will bottom during the first week of July.

Probing

The holes are being probed by Century Geophysical Corporation of Tulsa, Oklahoma. A truck-mounted Logging Control Unit, Model 2201, is being used and three logs, gamma ray, resistivity, and self-potential, are recorded.

Hole G-1-33 - Probed June 11, 1958. No trouble was encountered in getting to the bottom of the hole and a total hole depth of 2040 feet was recorded. This is six feet deeper than was reported by the drill crew, but can be explained by the fact that the 20-foot lengths of drill pipe used by the drillers often exceed 20 feet in length and could account for as much as a six-foot error in total depth.

No above background radioactivity was recorded in the hole and the hole is considered barren.

The Westwater Canyon member first shows on the log at 1828 feet and is approximately 202 feet thick. The upper 20 feet of the Westwater may be a sand unit locally termed the Poison Canyon sand. It is separated from the main body of the Westwater by a 15 - 17-foot sandy shale bed. This is typical of the Poison Canyon sand in other parts of the District.

Contacts noted on the geophysical log differ somewhat from those picked from examination of the core. An explanation of this follows under Sampling.

Sampling (See attached lithologic log)

Sludge samples are collected from every 10 feet of hole drilled. The samples are laid out on the ground near the drill holes and logged by a geologist. When drilling through the Westwater Canyon member or any other favorable or mineralized horizon, the samples are checked for radioactivity, sacked and saved for inspection by the Government.

When core drilling, all the core is checked for radioactivity, stored in core boxes and saved.

Hole G-1-33 - Sludge samples were saved to 1700 feet. Coring started at 1700 feet and continued to the bottom of the hole. All core was checked for radioactivity and none deemed worthy of chemical assay.

Correlating the contacts picked on the basis of core samples against those interpreted from the geophysical log showed a difference in contact depths and also in formation thicknesses. Some of the differences were attributed to the loss of core (89% recovery), but a study of the geophysical log and the core together showed the greatest difference to be based on the grain size of the sandstone units, e.g. - the geophysical log shows relatively sharp contacts between the formation members, but actual observation of core from the hole shows the contacts to be gradational in that the Brushy Basin - Westwater contact and the Westwater - Recapture contact is not a sharp break from shale to sandstone and back to shale again, but rather a gradual change from shale to very fine grained sandstone to medium and then coarse grained sandstone, followed by a reverse of this when going from the Westwater to

COPY

the Recapture member. It is difficult to pick the actual contact from the core but the sensitivity of the probe is such that it picks up the slightest change in compactness as well as lithological changes and the result is a more defined contact. Figure 1 shows a log of the drill hole as taken from both the geophysical log and core.

Hole G-2-4 - Present depth is 1610 feet and the bottom of the hole is still in the Mancos shale. It is expected that the Westwater member will appear at approximately 1800 - 1820 feet.

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General

Progress to date has been slow. Other commitments on the San Mateo Dome Project, started previous to the DMEA Program, necessitated the use of only one rig on DMEA work during the month of June. It is anticipated that this work will carry over into the month of July; however, plans now are to employ two rigs on DMEA work after the 1st of July. It is hoped that this will speed up progress and put us on the schedule that was set up in our DMEA Application.

Drilling and Related Costs (For month of June, 1958)

Actual Costs (Stage 1)

Category (1) Independent Contracts

1,500 feet of non-core drilling, 0 - 1,500 ft. depths @ $1.50/ft.	$ 2,250.00
200 feet non-core drilling, 1,500 - 2,200 ft. depths, @ $2.25/ft.	450.00
334 feet core drilling, 1,600 - 2,200 ft. depths, @ $13.00/ft.	4,342.00
2,034 feet probing and logging, @ $0.10/ft. (Century did not charge for the self-potential log because it started out somewhat erratic)	203.40

United States Dept. of the Interior July 5, 1958

No. 5

Cost of lost circulation material in excess of $100.00	2.00
3 hours bulldozing work @ $15.00 per hour	45.00
Category (7) <u>Miscellaneous</u>	
35 cardboard core boxes @ $1.17 per box	41.07
<u>Fixed Unit Costs</u>	
Incidental allowance for each foot of hole drilled, 2,034 feet @ $0.18/ft.	366.12
Grand Total	$ 7,699.59
Total expenditures submitted to DMEA during June, 1958	$ 7,699.59
Government participation @ 75%	$ 5,774.69

E. J. LONGYEAR COMPANY

B. F. Sorensen

B. F. Sorensen
Project Engineer

COPY

Department of the Interior

DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior, (Transfer to Office of Secretary)

T E L E T Y P E

J. W. TOMBERED
ALTERNATE ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION XIX
224 NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REFERENCE JUNE 13 SAN MATEO DOME PROJECT DOCKET 4842, A REVIEW OF RESULTS OBTAINED ON HOLE NO. 1 SHOWS THAT PROBING WOULD ADD NOTHING TO INFORMATION ALREADY ON HAND. THEREFORE PROBING OF THIS HOLE MAY BE WAIVED ADMINISTRATIVELY AND PAYMENT MADE FOR DRILLING BUT NOT FOR PROBING.

George C. Selfridge
CHAIRMAN, OPERATING COMMITTEE

MChing/gla
6-[illegible]58
cc to: Admr.'s Reading File
Operating Committee
T[illegible]Hilsgaard, 5224
Mr. Ching
Contract Adm. & Audit Division
DMEA Field Team, Region XIX confirmation

224 New Customhouse
Denver 2, Colorado
June 6, 1958

Gg. Com 100
800

Memorandum

To: Chairman, Operating Committee, DMEA

From: Alternate Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4842 (Uranium) Contract Idm-E1185
San Mateo Dome Project, E. J. Longyear Company, Agent,
(San Mateo Dome Project) McKinley County, New Mexico

Enclosed are two copies of a letter from the subject Operator dated June 5, 1958, concerning progress under the subject contract during the month of May, 1958. One hole was started during May, but was not completed to the contract objective; therefore, voucher and accounting Forms MF-104 and MF-104A were not submitted by the Operator.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosures

JWT:hmh

cc: Marshman
Hasler
DMEA/G.Jct.
Townsend
MF-104 file, Reg. III
Corres. file, Reg. III
Chron

} w/copy of Operator's letter of 6/5/58

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY

General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

June 5, 1958

United States Dept. of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting Executive Officer
DMEA Field Team, Region III

Progress Report No. 1 - Re: Docket No. DMEA 4842 (Uranium)
Contract Idm-E1183
San Mateo Dome Project,
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

This is to report to you that our first drill hole (No. G-1-32), started May 13, under subject contract, had reached a depth of approximately 1750 feet by the end of May. Coring started at 1700 feet on May 25.

The hole is scheduled for completion in June at a depth of 2050 feet. In view of this, under subject agreement for completed holes only, we are not submitting vouchers for any work performed in May.

We understand that your field team has visited the drilling operation.

Faithfully yours,

E. J. LONGYEAR COMPANY

R. C. Gebhardt

RCG:msb

DMEA
DEPARTMENT OF THE INTERIOR
JUN 6 - 1958
REGION III
DENVER, COLORADO

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REC'D JUN 6 1958
CODE
6/9 com 100
800

224 New Customhouse
Denver 2, Colorado
June 4, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Alternate Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4042 (Uranium) Contract IAm-81183, E. J. Longyear Company, Agent, (San Mateo Mole project) McKinley County, New Mexico

Enclosed are two copies of a memorandum dated June 3, 1958, from M. E. Salsbury, Mining Engineer, Bureau of Mines, concerning progress under the subject contract during May, 1958.

One drill hole was started, but was not completed to the contract objective during the period.

Original signed by
J. W. TOWNSEND
J. W. Townsend

Enclosures

JBC:bch

cc: Hardman
Hesler
DMEA/DPC
DMEA/G.Jnt.
Townsend
Courss.file, Reg.III
MF-10A file, Reg.III
Chron

w/copy of
M. E. Salsbury's
Memo. of 6/3/58

RECEIVED JUN 6 1958
INITIALS | CODE

P. O. Box 360
Grand Junction, Colorado

June 3, 1958

Memorandum

To: Alternate Acting Executive Officer, DMEA Field Team, Region III

From: M. H. Salsbury

Subject: Docket No. DMEA 4842 (Uranium), Contract IGm-E 1183,
E. J. Longyear Company, Agent (San Mateo Bonn Project),
McKinley County, New Mexico.--Progress report for May 1958.

Operations under the subject project for May 1958 were inspected on May 29, 1958 by a DMEA engineer in the area on other business.

No holes had been completed on the date of inspection and the drillers, Scott Brothers Drilling Company, had recessed over the Memorial Day weekend. One hole, no. G-1-33, had been drilled to an uncompleted depth of 1,760 feet of which the last 60 feet was cored. The operator's representative, Mr. Bryan Sorensen, was out of town. No valid claim can be made as yet on results to date.

H. F. Robertson
for M. H. Salsbury,
Mining Engineer

MHS/bh

DMEA
DEPARTMENT OF THE INTERIOR
JUN 3 - 1958
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
WASHINGTON 25, D. C.

SEP 15 1959

San Mateo Dome Project, a Joint Venture
E. J. Longyear Company, Agent
416 Colorado Building
Denver, Colorado

Re: Docket No. DMEA-4842 (Uranium)
San Mateo Dome Project
E. J. Longyear Company, Agent
McKinley County, New Mexico
Contract No. Idm-E1183

Gentlemen:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this project. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the period indicated.

We appreciate your interest and participation in the DMEA exploration program which has now been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George C. Selfridge

Acting Director

MChing/sma
May 20, 1959

Copy to: Docket
Dir. Reading File
CA & A Division
Mr. Ching
OME FT, Reg. III (2)

Mr. Melvin E. Richards
Mr. Henry C. Adams
Mr. G. R. Kennedy
E. J. Longyear Company
Mineral Projects, Inc.
Miss Elizabeth Adoor
Mr. Roy B. Shaw & Mrs. Belva L. Shaw
Mr. L. G. Shaw & Mrs. Elizabeth Shaw
Mr. Raymond E. Hartz

DEC 2 1958

Department of the Interior

TELETYPE

[redacted]

Atomic Energy and
Exports, Office of
Minerals Exploration, Interior, [illegible]

J. W. TOWNSEND, EXECUTIVE OFFICER
[redacted] FIELD TEAM, REGION III
[redacted] NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

REFERENCE NOVEMBER [redacted] SAN MATEO DOME PROJECT DOCKET [redacted], PROPOSED DRILLING RECOMMENDED BY YOU SATISFACTORY PROVIDED AREA REQUIRED BY REFERENCE IS SUBORDINATED AND CONSENT TO LIEN AND SUBORDINATION AGREEMENTS COVERING THE NEW AREA ARE EXECUTED.

George C. Selfridge

ACTING CHAIRMAN, OPERATING COMMITTEE

MJking/ecf
12/2/58
cc to: Dir. Reading File
Operating Committee
TERildgaard, 5224
Mr. Ching
Contract Adm. & Audit Division ✓
DMM Field Team, Region III, confirmation

EXTRA COPY O. M. E. RECEIVED NOV 13 1958		
DATE	INITIALS	CODE
		800

OFFICE OF MINERALS EXPLORATION
[illegible] New Customhouse
Denver 2, Colorado
November 10, 1958

Memorandum

To: Chairman, Operating Committee, OME

From: Executive Officer, OME Field Team, Region III

Subject: Docket No. RMRA 4582 (Uranium) Contract IAm-[illegible], B. F. Longyear Company, Agent, (San Mateo Rome Project) McKinley County, New Mexico

Enclosed are three copies of an approval issued by the Field Team, Region III, for transfer of non-core drilling footage and Incidental Allowance, together with Incident Costs from Stage II to Stage I, to permit completion of all Stage I holes to their objective.

Also enclosed are two copies of the Operator's request dated October 5, 1958, for the transfer. The engineer's recommendations relative to the transfer of drill footage are contained in the engineer's report which accompanied Form NF-104, Operator's Monthly Report and Voucher, for September 1958.

Copies of the approval have been distributed to the Operator, the Finance Office, and others concerned in Region III.

Original signed by
J. W. TOWNSEND
J. W. Townsend

Enclosures

JWC:bsh

cc: Fin. Office, Reg. III - w/copy of approval
Hartshorn
Emerick
Romalo, OME/Tuc.
Corres. file
Cooper
Churon
} w/copy of approval and Operator's letter of 10/5/58

FILE COPY		
C. M. E.		
RECEIVED	13	58
DATE	INIT.	

OFFICE OF MINERALS EXPLORATION
20A New Customhouse
Denver 2, Colorado
November 10, 1958

Mr. E. J. Lonergan
E. J. Lonergan Company, Agent
Box 993
Grants, New Mexico

Re: Contract No. EMOX 1042 (Uranium)
Contract EMX-X183
E. J. Lonergan Company, Agent
(San Mateo Mine Project)
McKinley County, New Mexico

Dear Mr. Lonergan:

In reference to your letter of October 3, 1958, this constitutes approval by the Government to transfer the following units of work and service, together with related costs, from Stage II to Stage I, to permit completion of Stage I holes to their objectives.

Item	Units Transferred
Core-core drilling (1500'-2000' interval)	170'
Incidental Allowance	62'

Nothing in this approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

Chief Field Team, Region III

By J. W. Townsend

J. W. Townsend

JRC:bmk

cc: Chem. Op. Comm. (3)
Finance Office, Reg.III
Amendment file, Reg.III
Markham
Rumble, OGE/Tus.
Emerick
Corres.file, Reg.III
Cooper
Charon

cc: Mr. R. U. Bathard
416 Colorado Building
Denver 2, Colorado

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941
CABLE ADDRESS
"LONGCODENVER"

OME
DEPARTMENT OF THE INTERIOR
OCT 9 - 1958
REGION III
DENVER, COLORADO

Grants, New Mexico
October 5, 1958

United States Department of the Interior
Office of Minerals Exploration
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 4842 (Uranium)
Contract Idm-E1183
E. J. Longyear Company
(San Mateo Dome Project)
McKinley County, New Mexico

Gentlemen:

Drilling under Stage I of Contract Idm-E1183 for the month of September, 1958 totaled 3,857 feet. Of the total, 600 feet was in the 1,500-2,200 foot interval. The 600 feet have been submitted for reimbursement on voucher and accounting Forms MF-104 and MF-104A for September.

Contract Idm-E1183 allows 6,000 feet of Stage I drilling in the 1,500-2,200 foot interval, but states that should more than the number of feet allowed be needed to complete the 13 Stage I holes, additional footage of non-core drilling and funds may, with the written approval of the Government, be transferred and deducted from Stage II.

Because the above mentioned 600 feet raises the total footage of Stage I, in the 1,500-2,200 foot interval, to 170 feet above that which is allowed by the Contract, it is herein requested that the additional footage and funds be transferred and deducted from Stage II.

Very truly yours,

E. J. LONGYEAR COMPANY

B. F. Sorensen

B. F. Sorensen
Project Engineer

BS:br
cc: 4-enclosed
1-sent to T. M. Romslo
Bureau of Mines
Tucson, Arizona

DMEA Form 14

Contract No. Idm-E 1183

Docket No. 1842

Executed ~~contract~~ amend.

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
April 4, 1958	III	New Mexico	Uranium

Name and Address of Operator: San Mateo Dome Project
E. J. Longyear Company, Agent
416 Colorado Building
Denver, Colorado

	Reserve	Obligation
Prior Amount	36,685.00	77,550.00
Increase	0	36,685.00
Decrease	36,685.00	0
Revised Amount	0	114,235.00

Remarks:

(Name)
Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date delivered to Bureau of Mines, Washington 6/30/58

22845

DMEA
RECEIVED JUN 20 1958
DATE | INITIAL | CODE

Audit copy

EXPLORATION PROJECT CONTRACT
SAN MATEO DOME PROJECT
DOCKET NO. DMEA-4842

AMENDMENT NO. 1

It is agreed this 18th day of June, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and San Mateo Dome Project, a Joint Venture, comprised of Lisbon Uranium Corporation and Mineral Projects - Venture B, Ltd., hereinafter called the "Operator," that Exploration Project Contract No. I6m-E1183, Docket No. DMEA-4842, dated April 4, 1958, hereinafter called the "Contract," is amended as follows:

1. In Article 1 of the Contract, the items Annex I(a) and map (Figure 1), attached to this amendment, are added as constituting a part of the Contract.

2. In Article 2 of the Contract, the words "and Annex I(a)" are added after the words "Annex I."

3. (a) In Article 2(b)(2) of the Contract, the Parador Mining Co., Roy B. Shaw and L. G. Shaw are added as parties having interests in the land.

(b) Consents to Lien and Subordination Agreements respecting interests in land referred to in Annex I(a) are attached to this amendment.

4. In Article 3 of the Contract, the completion date is extended from August 31, 1958, to December 31, 1958.

5. In Article 5 of the Contract, that portion preceding the colon is deleted and the following substituted:

"The estimated total allowable cost of the project set forth in Exhibit "A" is the sum of $176,770.00. The Government shall contribute 75 percent of the allowable costs under Stages I and II, and 50 percent of the allowable costs under Stages III and IV, as they are incurred, in a total sum not in excess of $114,235.00:"

6. In Exhibit "A," under Description of the Work:

(a) Under General Provisions: (1) The first sentence in the second paragraph is changed to read as follows:

"Drilling depths are estimated to average 2,030 feet in Stages I and II and 2,100 feet in Stages III and IV."

(2) The last paragraph is changed to read as follows:

"The work is divided into four stages, as hereinafter described. The Operator shall complete Stages I and III, and shall perform as much of Stages II and IV as the Government approves in writing in advance. In the event of Government approval of work under Stages II and IV, the work may be carried on concurrently with the work in the other stages."

(b) Stages III and IV are added as described hereinafter. The work in these stages is confined to the E½ section 32 T. 14 N., R. 8 W., described in Annex I(a). The general location of the work is shown on the map (Figure 1) referred to in Annex I(a).

Stage III

Prepare access roads and drill sites and drill 9 non-core holes aggregating an estimated 18,900 feet, at the locations indicated on the map (Figure 1). The holes are numbered 14 through 22 and the coordinates of each location are as follows:

Hole number	North (feet)	East (feet)
14.	314,300	561,200
15.	313,300	561,200
16.	312,300	561,200
17.	311,300	561,200
18.	312,300	562,200
19.	313,300	562,200
20.	313,300	563,200
21.	312,300	563,200
22.	311,300	563,200

Stage IV

Prepare access roads and drill sites and drill not more than 8 non-core holes aggregating not more than 16,800 feet as offsets to Stage III holes which penetrate ore grade material. Tentative locations of 8 holes are shown on the map (Figure 1) at the center of the 1,000-foot squares formed by Stage I holes. Thus, offset holes are expected to be spaced approximately 700 feet from previously drilled holes. However, a spacing of not less than 500 feet may be used when required to follow or prove a mineralized trend or when topography or other factors justify the closer offsetting.

7. In Exhibit "A," under Estimated Costs of the Project,

(a) Stages III and IV are added as follows:

Stage III

Actual Costs

Category (1) Independent Contracts

13,500 feet non-core drilling, 0-1500 foot depths, @ $1.50/ft.	$20,250.00
5,400 feet non-core drilling, 1500-2200-foot depths, @ $2.25/ft.	12,150.00
9 hours drill crew standby time @ $15/hr.	135.00
18,900 feet probing and logging @ $0.115/ft.	2,173.50
9 hours logging crew standby time @ $10/hr.	90.00
9 holes @ $40/hole for cost of circulation materials in excess of $100 per hole	360.00
12 hours bulldozing @ $15/hr.	180.00

Categories (2) through (6)

None

Category (7) Miscellaneous

15 chemical analyses @ $5/each	$75.00	$35,413.50

Fixed Unit Costs (See Annex II(d))

Incidental allowance 1/ for each foot of hole drilled, 18,900 feet @ $0.18/ft.	3,402.00
Estimated Total Cost of Stage III	$38,815.50

Stage IV

Actual Costs

Category (1) Independent Contracts

12,000 feet non-core drilling, 0-1500 foot depths, @ $1.50/ft.	$18,000.00
4,800 feet non-core drilling, 1500-2200-foot depths, @ $2.25/ft.	10,800.00
8 hours drill crew standby time @ $15/hr.	120.00
16,800 feet probing and logging @ $0.115/ft.	1,932.00
8 hours logging crew standby time @ $10/hr.	80.00
8 holes @ $40/hole for cost of circulation materials in excess of $100 per hole	320.00
12 hours bulldozing @ $15/hr.	180.00

Categories (2) through (6)

None

Category (7) Miscellaneous

20 chemical analyses @ $5/each	$180.00	$31,532.00	

Fixed Unit Costs (See Annex II(d))

Incidental allowance 1/ for each foot of hole drilled, 16,800 feet @ $0.18/ft.		3,024.00	
Estimated Total Cost of Stage IV			$34,556.00

(b) The Summary of Costs is revised to read as follows:

Summary of Costs

Estimated Total Cost of Stage I	$61,261.50		
Estimated Total Cost of Stage II	$42,142.50		
Estimated Total Cost of Stages I and II (rounded)		$103,400.00	
Government participation @ 75 percent			$77,550.00
Estimated Total Cost of Stage III	$38,815.50		
Estimated Total Cost of Stage IV	$34,556.00		
Estimated Total Cost of Stages III and IV (rounded)		$73,370.00	
Government participation @ 50 percent			$36,685.00
Estimated Total Cost of the Project		$176,770.00	
Government participation			$114,235.00

1/ Includes all allowable costs of the project under Categories (1) through (7) of Article 6(a) except as otherwise scheduled in Exhibit "A."

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mitteudorf
Administrator, Defense Minerals
Exploration Administration

SAN MATEO DOME PROJECT

Per K. J. Longyear Company, attorney-in-fact

By W D Sandell

Title Vice President

EXPLORATION PROJECT CONTRACT
SAN MATEO DOME PROJECT
DOCKET NO. DSEA-4842

ANNEX I(a)

In addition to the land described in Annex I, the land referred to in Article 2 of the Contract includes 30 whole or fractional lode mining claims situate in section 32, T. 14 N., R. 8 W., N.M.P.M.&B., McKinley County, New Mexico. The claims are shown on the map entitled "Figure 1 - Claims and Proposed Drilling on E½ Section 32, T. 14 N., R. 8 W., N.M.P.M., and Areas II and III, San Mateo Dome Project, McKinley County, New Mexico," attached hereto and made a part hereof.

The notices of location of the claims, to which reference is hereby made for a full and complete description, are recorded in the official records of McKinley County as follows:

Claims (Numbers are Inclusive)	Book	Page
Yucca 5824-5835	1300	290-294
Yucca 5837-5846	1300	303-312
Bulldog 1-5	7[illegible]	123-127
John 1-10	10[illegible]	173-182

The exact locations of the boundaries of the above-listed claims with respect to the boundaries of section 32 are not clearly defined. However, it is the intent of the parties to this Contract that all of the E½ Section 32 is included as land described in the Contract, notwithstanding that the recorded descriptions of the claims may not cover the entire E½ Section 32.

MF-205
(Combines and supercedes MF-20[illegible] and MF-203)
June 1956

RECEIVED
JUN 30 [illegible]
D.M.E.A.

For Government's Use Only
EXPLOR[illegible]ON PROJECT CONTRACT
Operator _____
Docket No. DMEA- [illegible]
Contract No. Idm-E _____
Contract Date _____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

All of [illegible] of Section 32, T. 14 N., R. 8 W., NMPM

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

The Ruco Mining & Exploration Co. Inc. knows of no liens, encumbrances or claims upon their interest and have not executed any instruments placing any lien or encumbrance on their interest. However Ruco interest is subject to a lease to [illegible] & Henry V. [illegible].

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 3rd day of May, 1950.

Melvin E. Richards [Seal] [illegible] [Address]

Melvin E. Richards

[Seal] [Address]

[Seal] [Address]

[Seal] [Address]

[Seal] [Address]

[Seal] [Address]

I, Elizabeth A. Hatcher, certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that Colvin [illegible] who signed this agreement was then President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Elizabeth A. Hatcher [Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ON PROJECT CONTRACT
Operator _____
Docket No. DMEA-[illegible]
Contract No. Idm-E _____
Contract Date _____

RECEIVED
JUN 30 1958
D.M.E.A.

DMEA
DEPARTMENT OF THE INTERIOR
JUN 12 1958
REGION III
DENVER, COLORADO

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of [illegible], State of [illegible], described as follows: 2/

[illegible]

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

[illegible]

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 11th day of June, 1958.

	[Seal]		[Address]
Charles Mill Co.	[Seal]	San Francisco Co.	[Address]
Elizabeth Adoor	[Seal]	San Carlos, California	[Address]
President	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, V.K. Karafontis certify that I am the Asst. Secretary (Secretary, etc.) of the corporation named herein; that Elizabeth Adoor who signed this agreement was then the President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

V.K. Karafontis [Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ON PROJECT CONTRACT
Operator_____
Docket No. DMEA-4995
Contract No. Idm-E_____
Contract Date_____

RECEIVED JUN 30 1958 D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

All of the E ½ of Section 32, T. 14 N., R. 8 W., NMPM

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

_____	[Seal]	_____	[Address]
~~Micral Projects - Yoakum D. Ltd.~~			
_____	[Seal]	_____	[Address]
D. M. Davidson			
Vice President	[Seal]	76 South 8th St.	[Address]
E. J. LONGYEAR COMPANY		Minneapolis 2, Minn.	
_____	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator_____
Docket No. DMEA-[illegible]
Contract No. Idm-E_____
Contract Date_____

RECEIVED
JUN 30 1958
D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of [illegible], State of [illegible], described as follows: 2/

[illegible]

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

[illegible]

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

_____	[Seal]	_____	[Address]
Henry C. Adams	[Seal]	_____	[Address]
Henry C. Adams	[Seal]	506 First City Natl Bank Bldg Houston 2, Texas	[Address]
G. R. Kennedy	[Seal]	448 San Jacinto Bldg Houston 2, Texas	[Address]
G. R. Kennedy	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLOR[illegible]ON PROJECT CONTRACT
Operator _____
Docket No. DMEA- [illegible]
Contract No. Idm-E _____
Contract Date _____

RECEIVED
JUN 30 1958
D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

All of B ½ of Section 32, T. 14 N., R. 8 W., N. M. P. M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

	[Seal]		[Address]
	[Seal]		[Address]
Roy B Shaw	[Seal]	7420 Central Ave. S. E. Albuq. New Mexico	[Address]
Belva L. Shaw	[Seal]	7420 Central Ave. S. E. Albuq. New Mexico	[Address]
Belva L. G. Shaw	[Seal]	4112 Swiss, Dallas 4, Texas	[Address]
Elizabeth Shaw	[Seal]	4112 Swiss, Dallas 4, Texas	[Address]

I, Erne C. Karter certify that I am the Notary Public (Secretary, etc.) of the corporation named herein; that _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

My Commission Expires May 19, 1956

Erne C Karter

[Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator_____
Docket No. DMEA-[illegible]
Contract No. Idm-E_____
Contract Date_____

RECEIVED
JUN 30 1958
D.M.E.A.

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

All of the E ½ of Section 32, T. 15 N., R. 8 W., NMPM

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

	[Seal]		[Address]
[redacted]			
	[Seal]		[Address]
Raymond E. Hartz		55 Green Village Road	
REH Raymond E. Hartz, Madison Projects, Inc.	[Seal]	Madison, New Jersey	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, Paul C. Hackett certify that I am the Asst. Secretary (Secretary, etc.) of the corporation named herein; that Raymond E. Hartz who signed this agreement was then Vice President (~~President~~ or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Paul C. Hackett

[Corporate Seal]

MME Form 14
Sept. 1958

Contract No. Idm-E) 14-23) 1183

Docket No. DMEA) MME) 4842

Date of Action 3/24/59
Terminated Contract

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor:

San Mateo Dome Project
E. J. Longyear Company Agent
416 Colorado Building
Denver, Colorado

Date of Contract	Region	State	Commodity
April 4, 1958	III	New Mexico	Uranium

	Reserve	Obligation
Prior Amount	0	114,235.00
Increase	0	0
Decrease	0	50,941.09
Revised Amount	0	63,293.91

Remarks:

cc: 800
210

43244

DMEA Form 14

Contract No. Idm-E 1183

Docket No. 4842

Approved Amendment

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
April 4, 1958	III	New Mexico	Uranium

Name and Address of Operator: San Mateo Dome Project
E. J. Longyear Company, Agent
416 Colorado Building
Denver, Colorado

	Reserve	Obligation
Prior Amount	0	77,550.00
Increase	36,685.00	0
Decrease	0	0
Revised Amount	36,685.00	77,550.00

Remarks:

(Name)

Allen S. Dakan, Chief, Operations Control and Statistics Division

(Title)

Date delivered to Bureau of Mines, Washington 6/19/58

22845

DMEA Form 14

Contract No. Idm-E1183

Docket No. 4842

DEPARTMENT OF THE INTERIOR

Executed contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
April 4, 1958	III	New Mexico	Uranium

Name and Address of Operator: San Mateo Dome Project
E. J. Longyear Company, Agent
416 Colorado Building
Denver, Colorado

	Reserve	Obligation
Prior Amount	77,550.00	0
Increase	0	77,550.00
Decrease	77,550.00	0
Revised Amount	0	77,550.00

Remarks:

(Name)
Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date delivered to Bureau of Mines, Washington 5/7/58

22845

OFFICIAL FILE COPY Auditor's copy
DMEA
RECEIVED MAY 2 1958

DATE	INITIALS	CODE

RECEIVED APR 8 195 E. J. LONGYEAR CO. DENVER, COLO.

MF-200
(Revised June 1954)

Docket No. DMEA 4842

Commodity Uranium

Contract No. Idm-E 1183

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Dwt copy

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 7 APR 1958 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] San Mateo Dome Project, a Joint Venture, comprised of Lisbon Uranium Corporation, a Utah corporation, and Mineral Projects - Venture B, Ltd., a limited partnership, whose mailing address is E. J. Longyear Company, Agent 416 Colorado Building, Denver, Colorado, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, ~~xxx~~ Annex II, and map (Figure 3)

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of New Mexico, County of McKinley, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a Assignment and Lease, [6] recorded in Book 15, page 301-314 and 315-319, official records of said County; and [7] the assigned leases being

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: Interests of Yucca Uranium, Inc. (Yucca Mining and Petroleum Company, Inc.), G. R. Kennedy, Henry C. Adams, E. J. Longyear Company, and Mineral Projects, Inc.

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consents to Lien and Subordination Agreements of the parties described in Article 2(b)(2).

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Uranium. The work to be performed is described in Exhibit "A." The Operator on or before July 1, 1958 shall commence the work, and on or before August 31, 1958 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall have completed the work except as otherwise provided in Exhibit "A" with respect to stages of work. See Annex II.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $103,400.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $77,550.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work. **See Annex II.**

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums. **See Annex II.**

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. See Annex II.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and related costs incurred.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. (See Annex II).

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value therof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

(For instance: the royalty on an amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—
See Annex II

Executed in sextuplicate the day and year first above written.

Lisbon Uranium Corporation and
Mineral Projects-Venture B, Ltd.,
a joint venture, known as:

SAN MATEO DOME PROJECT
(Operator)

Per E. J. Longyear Company, attorney-in-fact

By D. M. Davidson

Title Vice President

THE UNITED STATES OF AMERICA

By Administrator, Defense Minerals Exploration Administration

---

I, Rollin N. Dow, certify that I am the secretary of the corporation named as Operator herein; that D.M. Davidson who signed this contract on behalf of the Operator, was then Vice President of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Rollin N. Dow

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

EXPLORATION PROJECT CONTRACT
SAN MATEO DOME PROJECT
DOCKET NO. DMI-4042

ANNEX I

The land referred to in Article 2 of the Contract consists of 170 lode mining claims situate in sections 27, 33, and 34, T. 14 N., R. 8 W., and sections 3 and 4, T. 13 N., R. 8 W., N.M.P.M. & B., McKinley County, New Mexico. The claims are shown on the map entitled "Figure 3 - Claims and Proposed Drilling in Areas II and III, San Mateo Dome Project, McKinley County, New Mexico", attached hereto and made a part hereof.

The notices of location of the claims, to which reference is hereby made for a full and complete description, are recorded in the official records of McKinley County as follows:

Claims (Nos. are inclusive)	Book	Page
Falcon 4039-4074	14 MC	119-154
Palvadora 19-26 (Reclaims 19-26)	18 MC	357-364
Falcon 4103-4131	14 MC	191-217
Tomtat 1-9	OGT	132-140
Falcon 4142-4177	14 MC	257-292
Wildcat, Wildcat 2-7 and 9-22	7 MC	416-453
Yucca 3-4	35	594-595
Red 21-24 (Yucca 5-8)	39	201-204
Roberts 9-18	7 MC	183-192
Pancho 2-4, 6-8, and 10-20	7 MC	12-13 and 20-30

Excluded land. The Wildcat claim No. 8, and those portions of the Wildcat claims Nos. 5, 6, and 7, in sec. 3, T. 13 N., R. 8 W., which are south of the south boundary of the N½ of the S½ are excluded from the land referred to in Article 2. The exclusions are shown on the attached map, Figure 3.

EXPLORATION PROJECT CONTRACT
SAN MARCO MINE PROJECT
DOCKET NO. MMRA-4042

ANNEX II

Article 13. Changes and added provisions.—

(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work, except as otherwise provided in Exhibit 'A' with respect to stages of work."

(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

(c) Categories (2) through (6) of Article 6(a) are deleted.

(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the Contract.

(e) In the last sentence of Article 6(e), the words "Article 8" are substituted for the words "Article 9".

(f) Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the Contract.

(g) In Article 8(b) the period of ten years is changed to fifteen years.

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

RECEIVED
MAR 31 1958
D.M.E.A.

RECEIVED
APR 24 1958
D.M.E.A.

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
Contract Date _____

CONSENT TO LIEN and SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

Area 1 Township 14 North, Range 8 West, NMPM: Section 9, All; Section 16, All; Section 15, W½;
Area 2 Township 14 North, Range 8 West, NMPM: Section 33, All;
Township 13 North, Range 8 West, NMPM: Section 4, All, except a tract of land commencing 750 feet East and West and 400 feet North and South in the SE corner of said Section; Section 3, N½, NW¼
JWK
Area 3 Township 14 North, Range 8 West, NMPM: Section 27, All; Section 34, All;

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

NONE

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: NONE (State "None" or "See Annex No.____")

Dated this 13th day of February, 1958

Melvin E. Richards	[Seal]	YUCCA MINING & PETROLEUM CO. INC. 1224 4th NW, Albuq., N.M.	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, Elizabeth A. Hatcher certify that I am the Assistant Secretary Treasurer (Secretary, etc.) of the corporation named herein; that Melvin E. Richards who signed this agreement was then President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Elizabeth A. Hatcher
Ass't. Sec. Treas. [Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

Area 1, Township 14 North, Range 8 West, NMPM: Section 9, All; Section 16, All; Section 15, W½;
Area 2, Township 14 North, Range 8 West, NMPM: Section 33, All;
Township 13 North, Range 8 West, NMPM: Section 4, All, except a tract of land measuring 790 feet East and West and 400 feet North and South in the SE corner of said Section; Section 3, N½, N½S½, S½SW¼;

Area 3, Township 14 North, Range 8 West, NMPM: Section 27, All; Section 34, All;

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

The interest of Mineral Projects, Inc. in the land above described is an assignee of Mineral Projects - Venture II, a limited partnership, and Lucky Uranium Corporation.

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 15th day of March, 1958.

MINERAL PROJECTS INC.	[Seal]		[Address]
By E. J. LONGYEAR COMPANY	[Seal]		[Address]
By D.M. Davidson	[Seal]		[Address]
Vice President As Attorney for MINERAL PROJECTS INC.	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, Rollin N. Dow certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that D.M. Davidson who signed this agreement was then Vice President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Rollin N. Dow

[Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

RECEIVED
MAR. 31 1958
D.M.E.A.

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
Contract Date _____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

Area 1, Township 14 North, Range 8 West, NMPM: Section 9, All; Section 16, All; Section 15, W½;
Area 2, Township 14 North, Range 8 West, NMPM: Section 33, All;
Township 13 North, Range 8 West, NMPM: Section 4, All, except a tract of land measuring 750 feet East and West and 400 feet North and South in the SE corner of said Section; Section 3, N½, N½S½, S½S½;

Area 3, Township 14 North, Range 8 West, NMPM: Section 27, All; Section 34, All;

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

NONE

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this _____ day of _____, 195__.

Henry C. Adams	[Seal]	506 First City Natl. Bank Bldg. Houston 2, Texas	[Address]
Henry C. Adams G. R. Kennedy	[Seal]	448 San Jacinto Building Houston 2, Texas	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

For Government's Use Only
EXPLO[illegible]ION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
Contract Date _____

RECEIVED
MAR 31 1958
D.M.E.A.

CONSENT TO LIEN and SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of McKinley, State of New Mexico, described as follows: 2/

Area 1 Township 14 North, Range 8 West, NMPM: Section 9, All; Section 16, All; Section 19, W½;
Area 2 Township 14 North, Range 8 West, NMPM: Section 33, All;
Township 13 North, Range 8 West, NMPM: Section 4, All, except a tract of land measuring 790 feet East and West and 400 feet North and South in the SE corner of said Section;
Section 3, S½, N½S½
Area 3 Township 14 North, Range 8 West, NMPM: Section 27, All; Section 34, All;

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

NONE

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 17th day of February, 1958.

E. J. Longyear Company	[Seal]	76 S. 8th St. Minneapolis 2, Minn.	[Address]
By W M Burnhart Vice President	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, Rollin H. Dow certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that W. M. Burnhart who signed this agreement was then Vice President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Rollin H. Dow

[Corporate Seal]

EXPLORATION PROJECT CONTRACT
SAN MIGUEL ZONE PROJECT
DOCKET NO. DMEA-4242

EXHIBIT "A"

Description of the Work

General Provisions

The work consists of exploration by core and non-core drilling to test the Westwater Canyon sandstones of the Jackpile-Morrison formation for uranium.

Drilling depths are estimated to average 2030 feet. Drill holes shall not extend more than 20 feet below the contact between the Westwater Canyon and underlying Recapture members of the Morrison formation.

Non-core drilling may be either dry or wet. Dry cuttings or slurry samples shall be taken from each 10-foot interval drilled, and logged geologically. When drilling through the Westwater Canyon member or any other favorable or mineralized horizon, the samples shall be checked for radioactivity, washed, and saved for inspection by the Government. Samples indicating significant mineralization shall be split and one portion analyzed chemically for uranium.

When core drilling, all the core shall be saved, stored in core boxes, checked for radioactivity, and logged geologically. Sections indicating significant mineralization shall be split; one-half shall be analyzed chemically for uranium and one-half preserved for inspection by the Government.

Any stored samples may be disposed of by the Operator after approval by the Government.

All holes shall be probed and gamma ray, resistivity, and self-potential logs recorded.

The record of all logging and probing, together with certified copies of all assay certificates, shall be submitted with the Operator's monthly progress reports.

No hole shall be drilled closer than 200 feet to the outer boundaries of the land described in Annex I.

The Government will not contribute to any costs of an incompleted drill hole.

Access roads and drill sites shall be prepared with an RD-6 tractor-dozer, or an equivalent unit of the same or another make.

The project shall be supervised at all times by a geologist or mining engineer, who shall devote full time to the project work.

The location, direction, inclination, and extent of all project work are subject to the approval of the Government.

The work is divided into two stages, as hereinafter described. The Operator shall complete Stage I, and shall perform as much of Stage II as the Government approves in writing in advance.

Stage I

Prepare access roads and drill sites, and drill 13 holes, aggregating an estimated 26,200 feet, at the locations indicated on the map (Figure 3) referred to in Annex I. The holes are numbered 1 through 13 and the coordinates of each location are as follows:

Hole No.	North (Ft.)	East (Ft.)
1	311,200	564,800
2	309,200	564,800
3	307,200	564,800
4	309,700	566,800
5	307,700	566,800
6	308,200	568,800
7	307,700	570,800
8	308,500	572,600
9	317,400	571,200
10	316,200	569,200
11	315,400	571,200
12	315,900	573,200
13	317,900	573,200

If, as the drilling progresses, any location is found to be unfavorable as a result of the preceding drilling, such location may be changed to a more favorable location upon approval of the Government, but a spacing of approximately 2,000 feet shall be maintained.

All the holes shall be drilled non-core throughout, except holes Nos. 1 and 9. Each of these two holes shall be drilled non-core for a distance of approximately 1,000 feet, and those cored through the bottom not more than 300 feet.

If the 13 holes require more than 25,500 feet of non-core drilling to reach the desired horizon, additional footages of non-core drilling and funds may, with the written approval of the Government, be transferred and deducted from Stage II.

Stage II

Prepare access roads and drill sites and drill (non-core) not more than 10 holes, aggregating not more than 20,500 feet of drilling as offsets to Stage I holes. Tentative locations of 10 holes are shown on the map (Figure 3). However, the offsetting may be along the north-south fences as shown, or in other directions. Offset holes are expected to be spaced approximately 1,000 feet from previously drilled holes, but a spacing of not less than 500 feet may be used when required to follow or prove a mineralized trend.

Estimated Costs of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

19,500 feet non-core drilling,
0-1500 ft. depths, @ $1.50/ft. $29,250.00

6,000 feet non-core drilling,
1,500-4,500 ft. depths,
@ $2.25/ft. 13,500.00

700 feet core drilling, 1,[illegible] ft. depth, @ $13.00/ft. $ 9,100.00

13 hrs. drill crew stand-by time @ $15.00/hr. 195.00

26,[illegible] feet grading and logging @ $0.115/ft. 3,013.00

13 hrs. logging crew stand-by time @ $10.00/hr. 130.00

13 holes @ $[illegible]/hole for cost of circulation materials in excess of $[illegible] per hole [illegible]

24 hrs. helicopter @ $25.00/hr. [illegible]

Subcontracts (2) through (6)

None

Category (7) Miscellaneous

70 soil-bearing core boxes @ $1.25 each 87.50

30 chemical analyses @ $5.00 each 150.00 $96,[illegible]

Fixed Hole Costs (See Annex II (d))

Incidental allowance for each foot of hole drilled, 16,[illegible] feet @ $0.11/ft. 1,[illegible]

Estimated total cost of Stage I $[illegible]

Stage II

Actual Costs

Category (1) Subcontract Contracts

13,[illegible] feet non-core drilling, [illegible] ft. depths, @ $2.50/ft. $[illegible]

5,000 feet [illegible] drilling, 1,500-2,000 ft. depth, @ $4.75/ft. $[illegible]

10 hrs. drill pipe stand-by time @ $15.00/hr. [illegible]

20,000 feet pulling and logging @ $0.11[illegible]/ft. [illegible]

10 hrs. logging pipe stand-by time @ $15.00/hr. 150.00

10 holes @ $[illegible]/hole for part of exploitation waterwell in amount of $1[illegible]/hole [illegible]

30 hrs. bulldozing @ $15.00/hr. 450.00

Categories (2) through (6)

None

Category (7) Miscellaneous

24 chemical analyses @ $5.00 each 120.00 $36,[illegible]

Plant Unit Costs (See Annex II (a))

Incidental allowance[1] for each foot of hole drilled, 20,000 feet @ $0.18/ft. [illegible]

Estimated total cost of Stage II $[illegible]

Summary of Costs

Estimated Total Cost of Stage I $61,[illegible]

Estimated Total Cost of Stage II $[illegible]

Estimated Total Cost of the Project (rounded) $[illegible]

Government participation @ 75% $77,[illegible]

---

[1] Includes all allowable costs of the project under Categories (1) through (7) of Article 6(a), except as otherwise scheduled in Budget "A".

EXTRA COPY
DMEA
RECEIVED MAY 2 1958

DATE	INITIALS	CODE
		800

[illegible] Bar Customhouse
Denver 2, Colorado
April 30, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Project No. DMEA 4042 (Uranium), Contract No. DMe-8153, Sun Valley Mine Project, R. J. Longyear Company, Agent, Salisbury County, New Mexico

Enclosed are the Government's and Audit copies of Exploration Project Contract No. DMe-8153, which was forwarded by your letter of April 4, 1958 for signature by the Applicant and inception of a suitable starting date under Article 1.

Also enclosed are two copies of the Operator's letter, dated April 29, 1958, by which the executed copies of the contract were returned to us, and three copies of a letter from this office, dated April 30, 1958, whereby we forwarded the "Operator's Copy" of the contract, blank report forms, instructions relative to reporting on work performed under the contract, and outlined the procedures to be followed in communicating with this office in all matters pertaining to the contract.

The contract, dated April 4, 1958, provides for work estimated to cost $69,100.00, toward which the Government will contribute 75 percent, or not in excess of $77,325.00.

Copies of the contract have been distributed to the Finance Office and others concerned in Region III.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures

JSS:pfl

cc: Director
Finance Office, Reg. III
Director
DMEA/GS.Jnt.(Salisbury)
Director
DMEA/WV
Director, file - w/copy of letter to Operator.
Original
Copy.

w/copy of contract, letter to Operator, and one copy each of four powers of attorney.

224 New Customhouse
Denver 2, Colorado

APR 29 1958

EXTRA COPY
DMEA
RECEIVED MAY 21 1958

DATE	INITIALS	CODE

R. C. Gebhardt
J. Longyear Company, Agent
a Mateo Dome Project
6 Colorado Building
enver, Colorado

Re: Docket No. DMEA 4842 (Uranium)
Contract No. Idm-E1183
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico

Dear Mr. Gebhardt:

Enclosed is the "Operator's Copy" of Exploration Project Contract No. Idm-E1183, Docket No. DMEA 4842.

Also enclosed are six copies of Form MF-104, "Operator's Monthly Report and Voucher," and six copies of Form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to the

Defense Minerals Exploration Administration
P. O. Box 360
Grand Junction, Colorado.

The extra copy is for your records.

Forms MF-104 and MF-104A are to be combined into five sets of one of each form. Each set of the combined forms is to be accompanied by a map or sketch, showing the location and extent of work performed, and a signed narrative report which describes the work performed, conditions encountered, and results of the work. The monthly accounting report will not be processed for reimbursement unless it is accompanied by a signed narrative report and other required or pertinent data. Additional copies of Forms MF-104 and MF-104A will be forwarded to you each month on receipt of your report for the prior month.

The U. S. Geological Survey and the U. S. Bureau of Mines maintain a field office in the A.E.C. Compound at Grand Junction, Colorado. DMEA representatives of the two Services can be contacted as follows:

J. W. Hasler, Geologist, U. S. Geological Survey;
M. H. Salsbury, Mining Engineer, U. S. Bureau of Mines;

Telephone, Grand Junction, Chapel 3-2110,
Extension 272 or 202;

P. O. Box 360, Grand Junction, Colorado.

For your information, and in reply to many questions that been asked, after Forms MF-104 and MF-104A are received, an eer will check progress on the project and review your accounts, which they will be forwarded to this office for administrative ination and vouchering. If the report is in order, a check will ssued by the Treasury Department for the Government's portion of approved costs. If you have any difficulty in completing these rms and the reports, please call on either the field representatives or this office for assistance.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective, which has, or have been, drilled in compliance with the conditions under the "General Provisions" section of Exhibit "A" of the contract and the special conditions pertaining to the drilling under each stage. Therefore, your monthly report should include only such holes which are completed to that extent and the required records made a part of your claim for reimbursement.

The contract is prepared on form MF-200, and under its provisions and as outlined in Exhibit "A" attached to the contract, the allowable costs are a combination of "Actual Costs" and "Fixed Unit Costs", with established maximum average unit costs for the drilling and maximum unit costs which cannot be exceeded for the other items of work under Category (1). Under the provisions of Article 6 of the contract, the work outlined in Exhibit "A" under Category (1) is to be performed by an independent contractor. The actual costs of the work completed under Category (1) are to be recorded under item (1) on Form MF-104 and must be supported and documented by a signed or certified true copy of the billing from the subcontractor. The costs of sample analyses under Category (7) are to be recorded under item (7) on Form MF-104. The number of sample analyses reported must be documented by a copy of the assay return and a signed or certified true copy of the billing from the assayer. Amounts reported on the basis of the "Fixed Unit Costs" require no documentation, as they are otherwise verified. However, costs on a "Fixed Unit Cost" basis are to be recorded on Form MF-104 under item (1). The foregoing applies to both stages of work described in Exhibit "A". For further information relative to documentation of costs, please refer to instructions on the reverse side of Form MF-104. Also, please refer to instructions on the reverse side of Form MF-104A regarding preparation of that Form.

In reference to the drilling work under "Category (1)" of Exhibit "A", please refer to item (f) of Annex II attached to the Contract pertaining to the average unit cost. If costs incurred any month cause the average unit cost to be in excess of the maximum allowable average unit cost, such excess costs will be suspended, subject to reinstatement at a later date within the aggregate of such suspensions, should the costs incurred any subsequent month cause the average unit cost to fall below the maximum allowable average unit cost. The foregoing applies to each separate class of drilling under each work Stage.

In the event you desire to perform the work under Category (1) on company account instead of subcontracting it, as provided in the contract, it will be necessary that you request and obtain an appropriate amendment to the contract before reimbursement can be made to you for the Government's portion of the allowable incurred costs.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data. Each request for action by this office must pertain to one matter only. Such requests are <u>not</u> to be incorporated in your narrative report accompanying monthly progress report Forms MF-104 and MF-104A.

The locations of holes to be drilled under Stage I are indicated on the map, "Figure 3," attached to the contract. Should conditions encountered necessitate or make desirable a change in the location of any of the holes, approval of this office for the change must be obtained prior to performance of the drilling. Otherwise, the drilling may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that Stage II work is contingent on results obtained from Stage I, and performance of the work under Stage II is subject to the prior written approval of the Government.

When work under Stage I has been completed, or sufficiently so to permit evaluation of the results of the work, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the location and extent of the work completed and the location of the additional work proposed. Also, your request must include an evaluation of the work completed and include assay returns and any other pertinent data which will be of value to the Government in appraising the results of the work.

You should anticipate a suspension of operations between stages of work, to enable the Government Geologist and Engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible, if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or by the DMEA Field Team, Region III.

It is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the Contract.

Very truly yours,

Original signed by
E. N. HARSHMAN

Acting Executive Officer
DMEA Field Team, Region III

Enclosures

JWT:prl

cc: Chmn. Op. Comm. (3)
Finance Office, Region III
Amendment file, Region III
Harshman
Hasler
DMEA/Gr.Jct.(Salsbury)
DMEA/DFC
Corres. file
Townsend
Chron.

FORM 311A 10M 8-56

Longyear

E. J. LONGYEAR COMPANY

General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

ADDRESS REPLY TO
416 COLORADO BUILDING
DENVER 2, COLORADO
AMHERST 6-1941

CABLE ADDRESS
"LONGCODENVER"

April 25, 1958

EXTRA COPY
DMEA
RECEIVED MAY 2 1958

DATE	INITIALS	CODE

United States Dept. of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman, Acting Executive Officer
DMEA Field Team, Region III

Re: Docket No. DMEA 4842 (Uranium)
E. J. Longyear Company, Agent
(San Mateo Dome Project)
McKinley County, New Mexico
Proposed Exploration Project
Contract No. Idm-E1183

Gentlemen:

Pursuant to your letter of 8 April and ours of 9 April, we return herewith the four copies of subject contract with appropriate signatures affixed by Longyear and the required initials next to C.O.M. as you instructed for the first page.

In due course, we understand that we are next to expect receipt of "Operator's Copy" of the contract from you, together with report forms, instructions for reporting, and other instructions pertaining to communications with your office.

Due to several delays in the processing of the application for subject contract, first submitted some seven months ago, our own budget schedules have required revision calling for extra cash input for exploratory drilling during the delay to maintain the whole project in firm condition for subject contract's commencement of work. Therefore, in view of these circumstances this is to inform you, in response to your request, that we are setting the commencement date of subject contract for on or before July 1, 1958.

Yours faithfully,

E. J. LONGYEAR COMPANY

R. C. Gebhardt

RCG:msb

(800)

DMEA Form 14

A Ally

Contract No. Idm-E 1183

Docket No. 4842

DEPARTMENT OF THE INTERIOR

Approved Contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
April 4, 1958	III	New Mexico	Uranium

Name and Address of Operator:

San Mateo Dome Project
E. J. Longyear Company, Agent
416 Colorado Building
Denver, Colorado

	Reserve	Obligation
Prior Amount	0	0
Increase	77,550	0
Decrease	0	0
Revised Amount	77,550	0

Remarks:

ALLEN S. DAKAN
(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date delivered to Bureau of Mines, Washington 4/4/58

22845

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
JANUARY 1958
DOCKET 4842

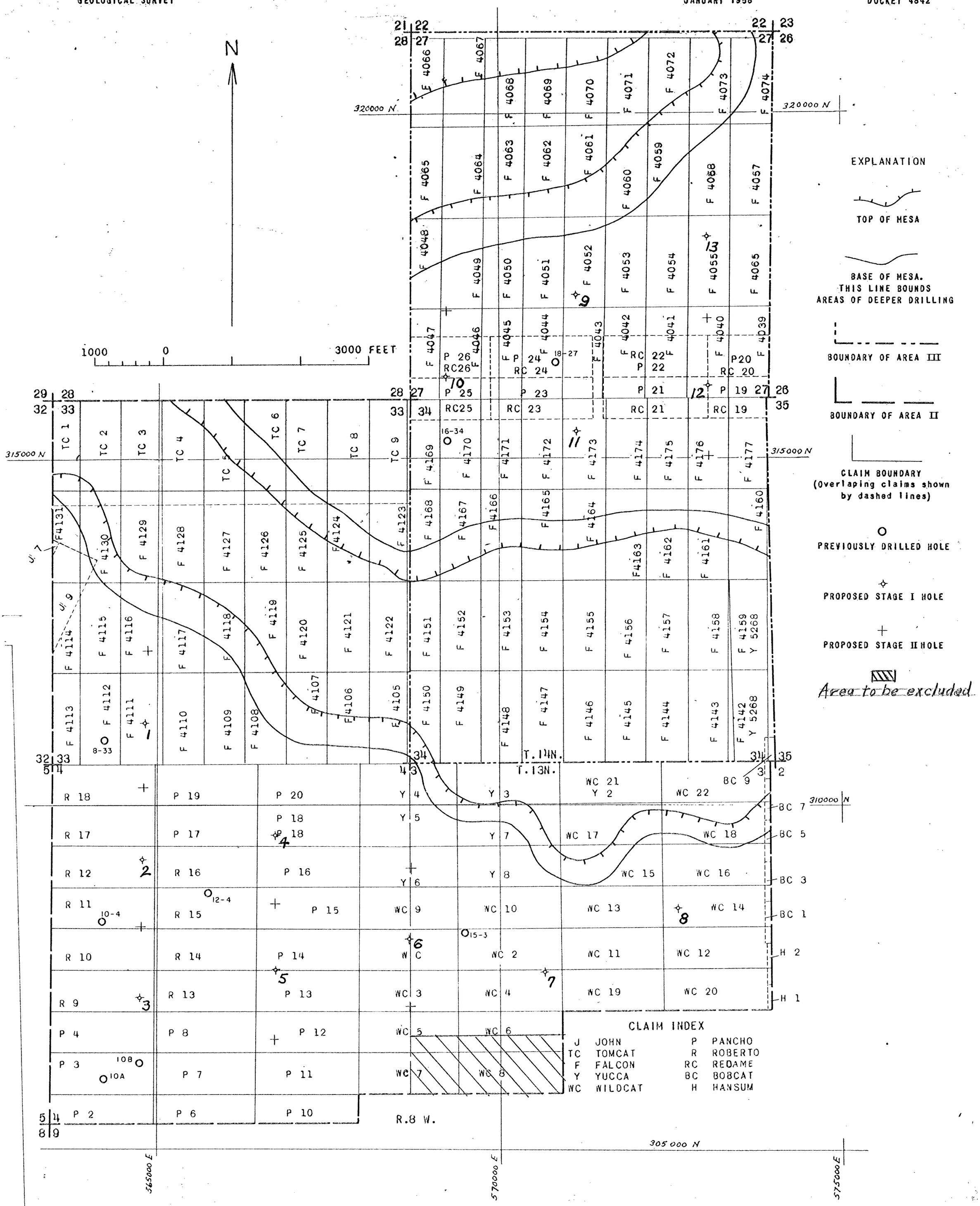

FIGURE 3.--CLAIMS AND PROPOSED DRILLING IN AREAS II AND III, SAN MATEO DOME PROJECT, McKINLEY COUNTY, NEW MEXICO.