ExxonMobil
Refining and Supply Company
Downstream-Safety, Health & Environment
3225 Gallows Road
Fairfax, Virginia 22037

RECEIVED

EXonMobil

Refining & Supply

May 12, 2003

MAY 1 9 2003

Division of Minerals and Geology

Tony Waldron
State of Colorado
Division of Minerals and Geology
Department of Natural Resources
1313 Sherman Street, Room 215
Denver, Colorado 80203-2273

RE: Reclamation Activities at the Indian Springs Prospecting Project

Dear Mr. Waldron:

This letter provides documentation of the reclamation activities for the Indian Springs Project (Project), Prospecting Permit Number P-80-090. The Project was conducted by Mobil Oil Corporation (Mobil), and consisted of uranium exploration in Larimer and Weld Counties in the late 1970s and early 1980s. In 1999, Mobil became a wholly owned subsidiary of Exxon Mobil Corporation (Exxon Mobil). Statewide Prospecting Bond No. 17-003-193 provides financial surety for the Project. Based on the completed status of the Project reclamation, Exxon Mobil is requesting that the Prospecting Permit be cancelled and the Project be released from financial surety.

Prospecting was conducted as described in three *Notices of Intent to Conduct Prospecting Operations* submitted to the Colorado Department of Natural Resources, Mined Land Reclamation Board, dated August 23, 1977, November 10, 1978, and October 27, 1980 (Attachment A). A total of 492 uranium exploration boreholes were drilled during this period. A map displaying the locations of the boreholes is presented in Attachment B. Drilling operations were completed on April 13, 1981.

Ms. Linda Walker, of Mined Land Reclamation Division inspected surface reclamation on November 18, 1983. In a letter to Mr. Robert B. Lundahl, Mobil, dated November 22, 1983, Ms. Walker classified the Project surface reclamation as "excellent" (Attachment C).

Mr. J. J. Faulhaber, of Alternative Energy, in an interoffice memo, dated May 28, 1985 (Attachment D) summarized borehole abandonment procedures and standards for the Project. Boreholes were abandoned with drilling mud consisting of varying viscosities from the bottom of the hole to ten feet below ground surface. Cement plugs were installed from ten feet to the surface or two feet below the surface depending upon local cultivation practices.

The borehole abandonment standards varied over the course of the Project, but the most stringent standards applied to the 1980 drilling program where 1) the Notice of Intent to Conduct Prospecting Operations (October 27, 1980) states that "All dry holes (those encountering no aquifers) shall be plugged from bottom to within ten feet of surface with a high viscosity drill mud...Any drill hole which encounters an aquifer(s) shall be plugged as follows: High viscosity mud shall be used to plug the hole as outlined above, except for the interval(s) containing the

aquifer which shall be cemented off top and bottom.", and 2) the House Bill 1195, which states "Drill holes which have encountered an aquifer in volcanic or sedimentary rock...shall be sealed utilizing a sealing procedure which is adequate to prevent fluid communication between aquifers."

The boreholes were drilled into the stratigraphic horizon that contains the Laramie-Fox Hills aquifer, a regional hydrogeologic unit that spans the base of the Laramie Formation and the top of the Fox Hills Formation. In a letter to Mr. Kenneth Holmes (Mobil), dated February 23, 1982 (Attachment E), Ms. Walker expressed concerns over the use of drilling mud in an interval of an aquifer, and the potential for contaminants in the upper Laramie Formation to enter the Laramie-Fox Hills aquifer.

However, in the area of the Project, the Laramie-Fox Hills interval appears to have low potential as a significant aquifer. Mr. Faulhaber's memo cites numerous reports describing the interval as consisting of clay rich siltstone and sandstone. Mr. Faulhaber concluded that "it would appear that the Laramie-Fox Hills interval, although potentially water bearing, does not possess sufficient permeability to constitute a significant aquifer." Based on this conclusion, the use of drilling mud in borehole abandonment is appropriate and consistent with the standards previously discussed.

The Project reclamation activities described above are consistent with the standards described in the *Notices of Intent to Conduct Prospecting Operations* reports, and House Bill 1195. Therefore, Exxon Mobil requests that the Prospecting Permit be cancelled and the Project be released from financial surety provided under Statewide Prospecting Bond No. 17-003-193.

If you have any questions about the attached information, please call me at (703) 846-1150.

Sincerely,

Mark E. Hoffman, P.E. Project Manager

MEH/ps Attachments

c: P. Sorek -- MFG file

RECEIVED MAY 1 9 2003

brasion of Minerals and Geology

ATTACHMENT A

200 1900

Mobil Oil Corporation

ROOM 1428

ENERGY MINERALS DIVISION - U.S.

October 27, 1980

Board of Land Commissioners Department of Natural Resources State of Colorado 620 Centennial Building 1313 Sherman Street Denver, Colorado 80203

APPLICATION FOR PROSPECTING PERMIT

Gentlemen:

Mobil Oil Corporation requests permission from the Colorado Board of Land Commissioners to conduct prospecting operations on the following state-owned lands:

T-9-N, R-67-W, Section 16 T-10-N, R-67-W, Section 16 T-10-N, R-67-W, South half, SW/4, Section 22 T-10-N, R-67-W, Section 28

Mobil currently holds a mining lease with the state covering the above described lands, and proposes to commence operations on or about the 11th of November, 1980. Attached please find a copy of the intent to prospect form required by the Colorado Mined Land Reclamation Board which contains the information requested for your prospecting permit. Also, please refer to Mobil's Statewide Bond currently in force (#8063-03-11) for the surety requirements.

We would appreciate approval of the requested permit at your earliest convenience. Should you require additional information, please don't hesitate to call me at (303) 572-2622.

Very truly yours,

Bruce A. Norton Field Coordinator

BAN:bb

Attachment

Mobil proposes to use the following plugging procedures, if approved, in the permit area.

All dry holes (those encountering no aquifers) shall be plugged from bottom to within ten feet of surface with a high viscosity drill mud. From the top of this mud plug to a minimum depth compatible with local cultivation practices, a concrete surface plug shall be installed.

Any drill hole which encounters an aquifer(s) shall be plugged as follows:

High viscosity mud shall be used to plug the hole as outlined above, except for the interval(s) containing the aquifer which shall be cemented off top and bottom. A concrete surface plug shall be installed as above.

A telephone conversation with a drilling inspector from the State Engineer's Office indicated that the interval grouting procedures outlined above would satisfy their requirements regarding plugging of aquifers. Also, the procedures outlined for dry holes are designed to conform to the standards outlined in the State Engineer's Abandonment Regulations.

RECEASIATION PERSONALS. State the measures to be taken to reclaim any affected land consistent with the applicable requirements of Rule 6 and any applicable regulations promulgated thereunder by the Board. All drill cuttings, mud and trash will be removed from the drill site and properly disposed of. Any significant surface disturbances will be graded to blend with the surrounding land surface. Should any significant area of vegetative cover be destroyed, an appropriate seed mix will be used to reseed the disturbed area, and any appropriate measures needed to ensure revegetation will be taken (mulching, scarifi cation, etc.). All aspects of this project should be completed within a year of commencement of prospecting. TERMS AND CONDITIONS FOR PROSPECTING OPERATIONS: 1. Reclamation measures shall be fulfilled in a timely manner. The prospecting operations described in this notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 6, precautions to be taken include: Confinement of operations to areas near existing roads or trails, where practicable. Timely plugging or capping of drill holes in a proper, inconspicuous and safe manner upon completion or abandonment, c. Reclamation of affected lands upon completion of operations or phases of an operation, d. Dispersing or burying materials removed from any such hole, e. Backfilling and revegetating any pits, and f. In the case where drill holes in sedimentary rock produce water, sealing separately from one another, aquifers that are separate and discrete, to prevent intermingling of water. 3. The prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations. 4. The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife. 5. During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to prevent significant alteration to the geomorphic processes at the site. Please refer to Statewide 6. The operator will post surety in the amount of Bond No. 8063-03-11 submitt Feb. 24, 1977. All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended, and any rules and regulations promulgated pursuant thereto. 8. The Board shall determine (when there is a question) if an operation is prospecting or mining.

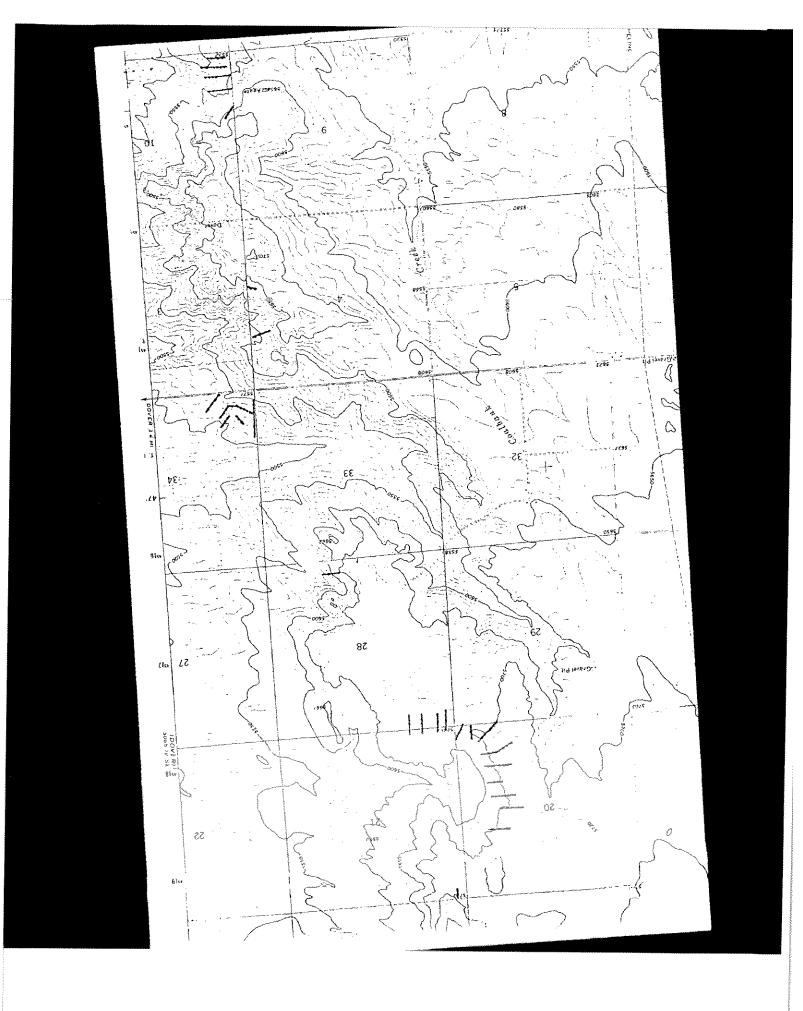
Signature of appropriate person(s) from 2 and/or 3

For the Soard

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g.

Date



1978

IMPORTANT: Pursuant to the terms of Rule 5, all information provided the Board in this Notice of Intent to Conduct Prospecting Operations shall be protected as confidential information by the Board and not be a matter of public record in the absence of a written release from the operator or upon a finding by the Board that reclamation is satisfactory, whichever may first occur.

I.	DATE OF FILI	NG OF THIS NOTICE	E OF INTENT: November 10, 1978
II.	PROSPECTOR:	Name, address, a prospecting:	and phone of person or organization doing the Mobil Oil Corporation
	-	Energy Minerals	Division - U.S.
		P.O. Box 5444, D	Denver, Colorado 80217
III.			as, and phone number of person in that organization
	Pe	eter A. Burkett, M	obil Oil Corporation, Energy Minerals Division - U.
	<u>P.</u>	0. Box 5444, Den	ver, Colorado 80217
IV.	DESCRIPTION	OF THE LANDS: S	Ite Name, if applicable: Indian Springs Project
		Location:	The lands are described as lying primarily with: TllN, TlON Township T9N, T8N , Range R67W-R68W
	•		
			Estimated acreage of affected land only 20 acre
	٠	•	Supply longitude and latitude if the area has no been surveyed. area has been surveyed
	t t	Intent to	s posting statewide surety must file a Notice of Conduct Prospecting Operations with the Board for ary township to be prospected.)
٧.	DATE OF COMM	ENCEMENT:	
		scribed prospecti y November 27,	ing activity is scheduled to commence on
VI.	TYPE OF OPER		•
	Describe the prospecting volve drilli	type of operation operations. For ng, trenching, but be conducted by	ons which will be undertaken in conducting the example: "The prospecting operations will in- ilk sample removal, shaft sinking, etc. The use of a truck mounted rig, mud drilling, air
	The prospec	cting operations i	nvolve drilling with a truck mounted rig,
			size will be 4-3/4" in diameter.
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VIII.

RECLAMATION MEASURES:

State the measures to be taken	to reclaim any	y affected land consiste	ac wich
the applicable requirements of	Rule 6 and any	y applicable regulations	promul-
gated thereunder by the Board.			

gate	d thereunder by the Board.
A11	cuttings and mud will be removed from each drill site and disposed of in
an a	adequate manner. If reseeding is found to be necessary, then each of
the	se sites will be evaluated and a seed bed prepared and then seeded with
	most applicable grass and/or shrub that the particular site may require

TER	4S AND CONDITIONS FOR PROSPECTING OPERATIONS:
1.	Reclamation measures shall be fulfilled in a timely manner.
2.	The prospecting operations described in this notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 6, precautions to be taken include:
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	where practicable,
	and safe manner upon completion or abandonment,
	 Reclamation of affected lands upon completion of operations or phases of an operation,
	d. Dispersing or burying materials removed from any such hold,
	e. Backfilling and revegetating any pits, and f. In the case where drill holes in sedimentary rock produce water, sealing separately from one another, aquifers that are separate and discrete, to prevent intermingling of water.
3.	The prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations.
4.	The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife.
5.	During the prospecting operations, the operator will perform the neces-
	sary stabilization and reclamation work to prevent landslides, flood or Please refer to Statewide Borerosion. No.8063-03-11 submitted
6.	The operator will post surety in the amount of 2/24/77.
7.	All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended, and any rules and regulations promulgate pursuant thereto.
bu.	10,1978 Signature of appropriate person(s) from II and/or III
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Date

For the Board

NOTICE OF INTENT TO CONDUCT PROSPECTING OPERATIONS

IMPORTANT: Pursuant to the terms of Rule 5, all information provided the Board in this Notice of Intent to Conduct Prospecting Operations shall be protected as confidential information by the Board and not be a matter of public record in the absence of a written release from the operator or upon a finding by the Board that reclamation is satisfactory, whichever may first occur.

I. DATE OF FILING OF THIS NOTICE OF INTENT: November 10, 1978

III. PROSPECTOR: Name, address, and phone of person or organization doing the prospecting: MOBIL OIL CORPORATION FILE OF MINISTERS. — U.S. PO. BOX STIFF T.A. DENDER, Colorado 8001 III. CONTACT: Submit name, address, and phone number of person in that organization who should be contacted concerning reclamation: Phone (1915) 572-2720 Peter A. Burkett, Mobil Oil Corporation Paters of Mayenals, U.S. P.O. Box STIFF. Denver G. Series IV. DESCRIPTION OF THE LANDS: Sita Name, if applicable: INDIAN Springs People Location: The lands are described as lying primarily within: TIN, 7700, Township 1791, 1801, Ranges Plate Actual Estimated acreage of affected land only 2000ccs. Supply longitude and latitude if the area has not been surveyed. Acca has Recan Surveyed. (Operators posting statewide surety must file a Notice of Intent to Conduct Prospecting Operations with the Board for each primary township to be prospected.) V. DATE OF COMMENCEMENT: The above described prospecting activity is scheduled to commence on approximately November 27, 1975 VI. TIPE OF OPERATION: Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc." The peospecting Operations Whole Depling with A TRUCK mounted Rig, with Mud. Appearmants have Size will Be Will Be 434" (A) Difmeter.			
Firefig Minicrals — U.S. P.O. Box SYNY T.M. Denuer, Colorado 800/. III. CONTACT: Submit name, address, and phone number of person in that organization who should be contacted concerning reclamation: Phone (301) 572-2120 Peter A. Burkett, Mobil Oil Corporation Energy Minicrals, U.S. P.O. Box SYNYTA, Denuer G. Solid Control of the Lands: Site Name, if applicable: Indian Spenies Teoject Iv. Description of the Lands: Site Name, if applicable: Indian Spenies Teoject Location: The lands are described as lying primarily within: Tinn, Tion, Township Ton, T.S., Ranges Pash—Roy Within: Tinn, Ton, Township Ton, T.S., Ranges Pash—Roy Within: Tinn, Ton, Corporators posting statewide surety must file a Notice of Intent to Conduct Prospecting Operations with the Board for each primary township to be prospected.) V. DATE OF COMMENCEMENT: The above described prospecting activity is scheduled to commence on approximately November 22, 1975 VI. TYPE OF OPERATION: Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc."	II.	PROSPECTOR:	prospecting: MOBIL OIL CORPORATION
P.O. Box SHIPT. Denuer, Colorado 882. III. CONTACT: Submit name, address, and phone number of person in that organization who should be contacted concerning reclamation: Phone (501) 572-2720 Peter A. Burkett, Mobil Oi Corporation Entroy Minionals, U.S. Po. Box SHIPT. Denues G. IV. DESCRIPTION OF THE LANDS: Site Name, if applicable: FNDAN Springs Project Location: The lands are described as lying primarily within: THIN, TION, Township TIN, TEN., Ranges ROSW—ROTW Estimated acreage of affected land only 200cass Supply longitude and latitude if the area has not been surveyed. Acca has Born Surveyed (Operators posting statewide surety must file a Notice of Intent to Conduct Prospecting Operations with the Board for each primary township to be prospected.) V. DATE OF COMMENCEMENT: The above described prospecting activity is scheduled to commence on approximately November 27, 1975 VI. TYPE OF OPERATION: Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc."		•	
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approximately November 27, 1978 VI. TYPE OF OPERATION: Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc."	۵.	DATE OF COM	MENCEMENT:
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REC	CLAMATION MEASURES:
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	Il cuttings and mus will be Removed from each
	orill site and Disposes of in an Adequate
m	PANNER. If Reserving is found to Be
Δ/	ecessing, Then Each of These sites will Be
	united AND A seed BED prepared AND then
	seeded with the most applicable grass and/or
	hous that the particular site may Require.
TE	ERMS AND CONDITIONS FOR PROSPECTING OPERATIONS:
1.	the substitute of the substitu
2.	to the parties will be conducted in
	a. Confinement of operations to areas near existing roads or trails,
	where practicable, b. Timely plugging or capping of drill holes in a proper, inconspicuous
	and safe manner upon completion or abandonment, c. Reclamation of affected lands upon completion of operations or phases
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	 e. Backfilling and revegetating any pits, and f. In the case where drill holes in sedimentary rock produce water,
	sealing separately from one another, aquifers that are separate and discrete, to prevent intermingling of water.
3.	The prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations.
4.	. The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife.
5.	During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to prevent landslides, flood or erosion. Please Refer to Statewide
6.	Bovo No. 8063-03-// The operator will post surety in the amount of SusmiTED 24 FCRRussy, (4))
	. All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended, and any rules and regulations promulgated

For the Board

Signature of appropriate person(s) from II and/or III

pursuant therato.

Date

Date

ADDENDUM TO NOTICE OF INTENT TO CONDUCT PROSPECTING

- 1. Additional Information
 - a. Additional townships may be placed on an additional page.
 - b. Additional information that cannot be placed on this form may be included as additional exhibits.
- 2. The filing of a notice of intent does not necessarily place responsibility for all disturbances made under that notice. The prospector will be held responsible only for those disturbances which meet the definition of prospecting as defined in the Act and the Rules and Regulations.

NOTE: Two or more disturbances within 300 feet of each other will be considered to be in the same acre of land.

14.1

NOTICE OF INTENT TO CONDUCT PROSPECTING OPERATIONS

1977

IMPORTANT: Pursuant to the terms of Rule 5, all information provided the Board in this Notice of Intent to Conduct Prospecting Operations shall be protected as confidential information by the Board and not be a matter of public record in the absence of a written release from the operator or upon a finding by the Board that reclamation is satisfactory, whichever may first occur.

ı.	DATE OF FILING OF THIS NOTICE OF INTENT: August 23, 1977
II.	PROSPECTOR: Name, address, and phone of person or organization doing the prospecting: MOBIL OIL CORPORATION
	Energy Minerals - U.S. & Canada
٠	P.O. Box 5444 T.A., Denver, Colorado 80217
III.	CONTACT: Submit name, address, and phone number of person in that organization who should be contacted concerning reclamation: Phone (303) 572-200
	Charles Greenberg, MOBIL OIL CORPORATION,
IV.	Energy Minerals U.S.& Canada, P.O. Box 5444 T.A. Denver, Colorado 80217 DESCRIPTION OF THE LANDS: Site Name, if applicable: Indian Springs Project
	Location: The lands are described as lying primarily with
3	T11N, T10N, Township s:T9N, T8N, Ranges: R68W, R67W
	Estimated acreage of affected land only 20 acr
	Supply longitude and latitude if the area has n been surveyed. Area has been surveyed.
	(Operators posting statewide surety must file a Notice of Intent to Conduct Prospecting Operations with the Board fo each primary township to be prospected.)
v.	DATE OF COMMENCEMENT:
	The above described prospecting activity is scheduled to commence on approximately October 1, 1977
VI.	TYPE OF OPERATION:
	Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc."
	The prospecting operations involve drilling with a truck mounted
	rig, with mud. Approximate hole size will be 4 3/4" in
	diameter.
	Note: This notice inchedes
	- the 1977-1978 drilling
	man program.
	- OUT-77 to JAN 1978
	(193 ± holes).
	- horas hay som alto

-2-
RECLANATION MEASURES:
State the measures to be taken to reclaim any affected land consistent with the che applicable regulations promulagated thereunder by the Board.
All cuttings and mud will be removed from each drill site and
disposed of in an adequate manner. If reseeding is found to be
necessary, then each of these sites will be evaluated and a seed
bed prepared by discing, harrowing and then seeded with the most
applicable grass and/or shrub that the particular site may require

TERMS AND CONDITIONS FOR PROSPECTING OPERATIONS: VIII.

- 1. Reclamation measures shall be fulfilled in a timely manner.
- 2. The prospecting operations described in this notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 6, precautions to be taken include:
 - Confinement of operations to areas near existing roads or trails, where practicable,
 - b. Timely plugging or capping of drill holes in a proper, inconspicuous and safe manner upon completion or abandonment,
 - Reclamation of affected lands upon completion of operations or phases of an operation,
 - Dispersing or burying materials removed from any such hold,
 - Backfilling and revegetating any pits, and
 - In the case where drill holes in sedimentary rock produce water, sealing separately from one another, aquifers that are separate and discrete, to prevent intermingling of water.
- 3. The prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations.
- 4. The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife.
- 5. During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to prevent landslides, flood or Please refer to State erosion. wide bond No. 8063-03-
- 6. The operator will pose salety in the amount of authorithed 24 February
- 7. All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended, and any rules and regulations promutgat pursuant thereto.

august 23,1977	Signature of appropriate person (6) from 11 and	or II

Date

For the Board

NOTICE OF INTENT TO CONDUCT PROSPECTING OFERATIONS

IMPORTANT: Pursuant to the terms of Rule 5, all information provided the Board in this Notice of Intent to Conduct Prospecting Operations shall be protected as confidential

information by the Board and not be a matter of public record in the absence of a written release from the operator or upon a finding by the Board that reclamation is satisfactory, whichever may first occur. 1. DATE OF FILING OF THIS NOTICE OF INTENT: August 23, 1977 II. PROSPECTOR: Name, address, and phone of person or organization doing the prospecting: MOBIL OIL CORPORATION Energy Minerals - U.S. & Canada P.O. Box 5444 T.A., Denver, Colorado 80217 III. CONTACT: Submit name, address, and phone number of person in that organization who should be contacted concerning reclamation: Phone (303) 572-2000 Charles Greenberg, MOBIL OIL CORPORATION, Energy Minerals U.S.& Canada, P.O. Box 5444 T.A. Denver, Colorado 80217 IV. DESCRIPTION OF THE LANDS: Site Name, if applicable: Indian Springs Project Location: The lands are described as lying primarily within: T11N, T10N, Township s:T9N, T8N, Ranges: R68W, R67W Estimated acreage of affected land only 20 acres Supply longitude and latitude if the area has not been surveyed. Area has been surveyed. (Operators posting statewide surety must file a Notice of Intent to Conduct Prospecting Operations with the Board for each primary township to be prospected.) V. DATE OF COMMENCEMENT: The above described prospecting activity is scheduled to commence on October 1, 1977 approximately VI. TYPE OF OPERATION: Describe the type of operations which will be undertaken in conducting the prospecting operations. For example: "The prospecting operations will involve drilling, trenching, bulk sample removal, shaft sinking, etc. The drilling will be conducted by use of a truck mounted rig, mud drilling, air drilling, etc." The prospecting operations involve drilling with a truck mounted rig, with mud. Approximate hole size will be 4 3/4" in diameter.

UTT	DECT AMATTOM	WEACHD DC.

State the measures to be taken to reclaim any affected land consistent with the applicable requirements of Rule 6 and any applicable regulations promulgated thereunder by the Board.

All cuttings and mud will be removed from each drill site and disposed of in an adequate manner. If reseeding is found to be necessary, then each of these sites will be evaluated and a seed bed prepared by discing, harrowing and then seeded with the most applicable grass and/or shrub that the particular site may require.

VIII. TERMS AND CONDITIONS FOR PROSPECTING OPERATIONS:

- 1. Reclamation measures shall be fulfilled in a timely manner.
- 2. The prospecting operations described in this notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 6, precautions to be taken include:
 - Confinement of operations to areas near existing roads or trails, where practicable,
 - Timely plugging or capping of drill holes in a proper, inconspicuous and safe manner upon completion or abandonment,
 - Reclamation of affected lands upon completion of operations or phases of an operation,
 - d. Dispersing or burying materials removed from any such hold,
 - e. Backfilling and revegetating any pits, and
 - f. In the case where drill holes in sedimentary rock produce water, sealing separately from one another, aquifers that are separate and discrete, to prevent intermingling of water.
- The prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations.
- The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife.
- 5. During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to prevent landslides, flood or erosion.

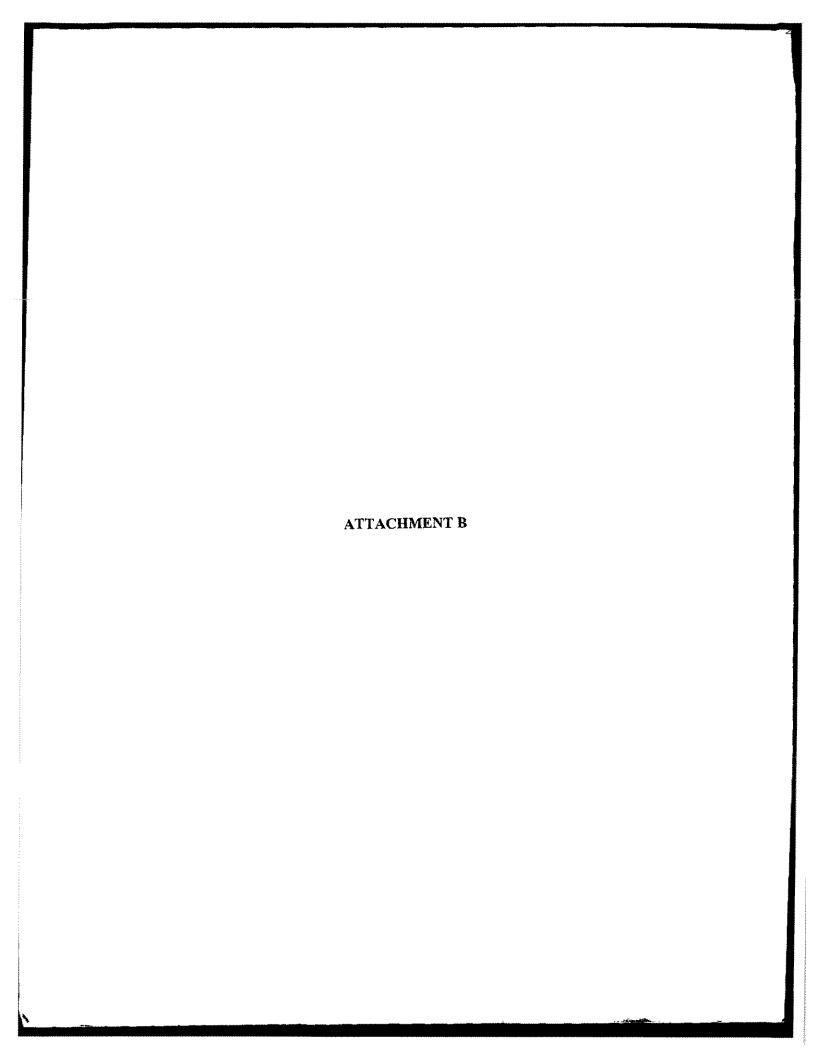
 Please refer to Statewide bond No. 8063-03-11
- 6. The operator will post curety in the amount of cubmitted 24 Pahrnary 19
- All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended, and any rules and regulations promulgated pursuant thereto.

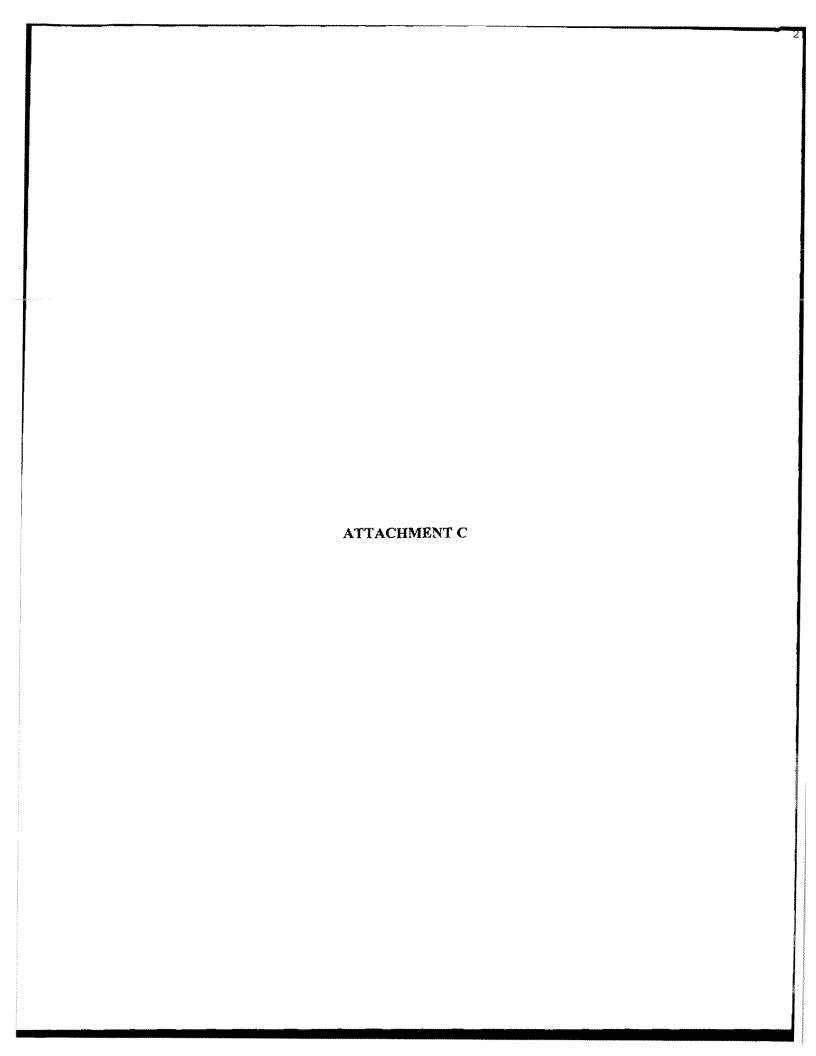
Date	For the Board
	•
Date /	Signature of appropriate person(s) from II and/or III
august 33,1977	Charles Grenley

ADDENDUM TO NOTICE OF INTENT TO CONDUCT PROSPECTING

- 1. Additional Information
 - a. Additional townships may be placed on an additional page.
 - b. Additional information that cannot be placed on this form may be included as additional exhibits.
- The filing of a notice of intent does not necessarily place responsibility for all disturbances made under that notice. The prospector will be held responsible only for those disturbances which meet the definition of prospecting as defined in the Act and the Rules and Regulations.

NOTE: Two or more disturbances within 300 feet of each other will be considered to be in the same acre of land.







Richard D. Lamm Governor

DEPARTMENT OF NATURAL RESOURCES David H, Getches, Executive Director

MINED LAND RECLAMATION DIVISION DAVID C. SHELTON, Director

CC 6. 10 1/24/67

November 22, 1983

Mr. Robert 8. Lundahl Mobil Oil Corp. P.O. Box 17772 Denver, Colorado 80217

Dear Mr. Lundahl:

On November 18, 1983, I inspected, with you and Sally White, Mobil's exploration reclamation for the three prospecting Notices for Indian Springs, filed August 23, 1977, November 10, 1978 and October 27, 1980.

The specific areas we spot checked are as follows.

TION, R67W Section line between 18 + 19. There was no trace of the drill sites.

TION, R67W Section line between 17 + 20. This was a plowed field, so there was no trace of the drill sites.

TION, R67W SE 1/4 Section 20. A reclaimed dozer cut already had a good vegetative cover. The regrading was excellent. The plugged drill holes in this area were marked with yellow rope.

T9N, R67W Section 10. Disturbance was not visible.

T10N, R67W SW 1/4 Section 34. There were 5-6 drill holes plugged and marked with yellow rope. There was no other sign of surface disturbance except for a former mud pit with slightly different vegetation.

Reclamation was excellent. This was largely due to the fact that little surface disturbance was incurred during drilling. Mobil is to be commended for keeping surface disturbance so minimal.

Once the paperwork has been completed by you, we should be able to release these three Notices.

Sincerely,

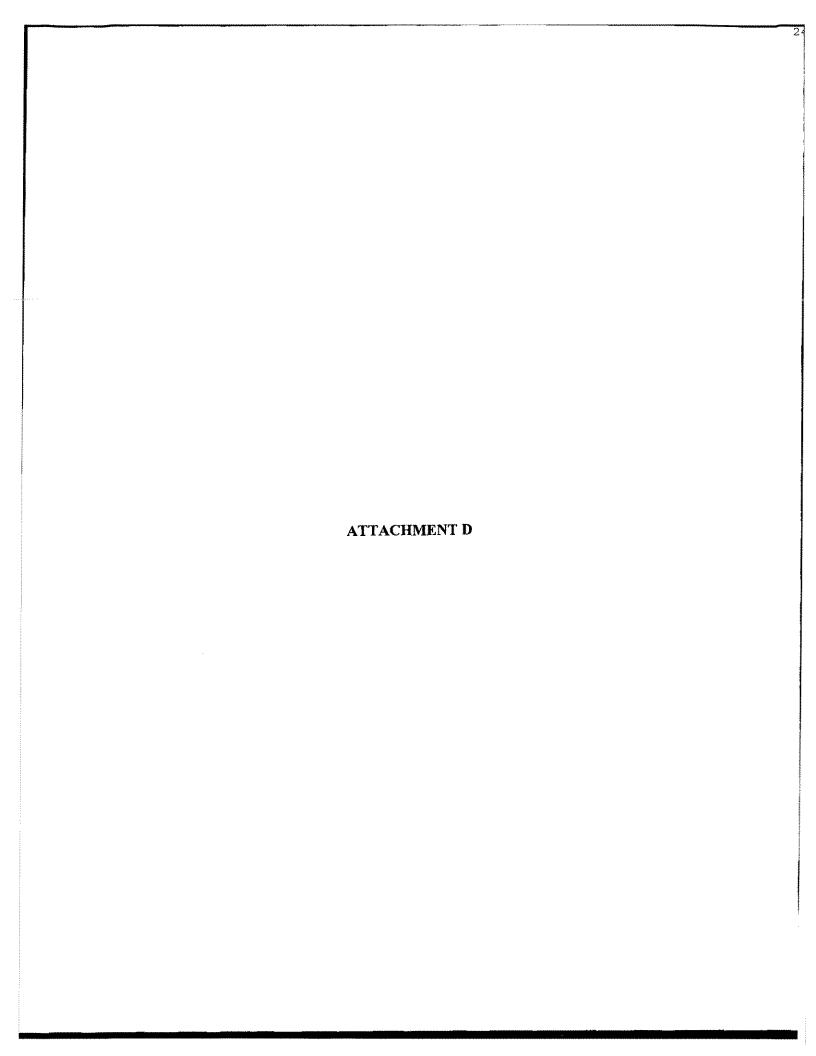
Linda Walker

Kirds Wally

Reclamation Specialist

LW/th

Doc. No. 7195



TO File

Alternative Energy DATE May 28, 1985

CC

INDIAN SPRINGS PROJECT
PLUGGING AND ABANDONMENT PROCEDURES
AND AQUIFER PROTECTION
1977, 1978 and 1980 DRILLING PROGRAMS

The following are notes and comments regarding the question of plugging and abandonment and aquifer protection in the Indian Springs project area.

Laramie-Fox Hills Aquifer in the Indian Springs Area

- In her letter of February 23, 1982 to Mr. Kenneth Holmes of Mobil, Linda Walker with the Colorado MLRD expressed concern that in our drilling programs, we had penetrated the Laramie-Fox Hills aquifer, an aquifer found at the base of the Laramie formation and top of the Fox Hills formation. Her concern was that in doing so, we established the potential for possible contaminants found in the Laramie Formation to enter the aquifer.
- Mobil's stratigraphic determinations of the Indian Springs property place the principal target sand, the K sand, near the base of the Laramie formation. A secondary sand of possible interest, the M sand, was placed at the top of the Fox Hills Formations. Other sands in the interval are the J&L sands. Thus based on stratigraphic nomenclature, it appears that the target interval in our drilling is startigraphically equivalent to the Laramie-Fox Hills aquifer.
- Several items point to the Laramie-Fox Hills aquifer interval as having a low potential as an aquifer in Mobil's Indian Springs project. The first of these are the general lithologic descriptions supplied by Michael Rice of Mobil to Linda Walker in connection with the 1980 Indian Springs abandonment report (attached Fig. 1). In those descriptions, the basal Laramie and upper Fox Hills Formations were described as silty sandstone and siltstone with mudstone. In addition, in his 1980 report on the Indian Springs property, R. L. Potucek (attached Fig. 2) describes the J&K sands in the interval as being muddy sandy siltstone rather than sandstone. The lithology of the L&M sands is not described; however, their character on the example log in Hickey's 1977 report (Fig. 2) Attached Fig. 3 suggests that they are similarly rich in clay content, with the M sand perhaps

To File Page 2 May 28, 1985

being a little more clay rich. Based on these descriptions and the fact that the holes were plugged as dry holes (using mud rather than cement), it would appear that the "Laramie-Fox Hills" interval, although potentially water bearing, does not possess sufficient permeability to constitute a significant aquifer.

Plugging and Abandonment Procedures

1980 Program

Applicable Standards

Section 6 of "Operational Instructions - Relating to Exploration on State-owned Lands and Minerals" issued by the Board of Land Commissioners, State of Colorado (ref. SLB 9/80) and attached to prospecting permit No. 854 from the Mineral Department of the State Board of Land Commissioners (for the Indian Springs Project) states:

"All holes shall be substantially and safely plugged according to the State Engineer's requirements for water wells. Cement all geologic formation contacts. Cement all aquifers top and bottom. ... Uranium exploration holes shall be cemented from bottom to three feet below plow depth. Any other method of plugging uranium exploration holes shall be submitted for Board approval prior to use."

Attached to permit No. 854 was a proposed "Mobil" plugging procedure (see attached Fig. 4). This method was approved by T. E. Bretz, Mineral Director, on November 12, 1980. Briefly, the proposed Mobil procedure states that we will plug all dry holes (those encountering no aquifers) from bottom to within ten feet of the surface with a "high viscosity drill mud". Viscosity, mud weight and gel strength were not specified. Any aquifers encountered were to be "cemented off top and bottom". In the upper ten feet of all holes, we proposed plugging with a concrete surface plug from ten feet to a minimum depth "compatible with local cultivation practices".

In correspondence from Linda Walker, Mined Land Reclamation to Bruce Norton (attached Fig. 5) in reference to the Indian Springs program, Ms Walker states: "Note: Drill holes must be plugged in compliance with House Bill 1195. When the regulations and drill hole reporting forms are approved, I will forward them to Mobil." House Bill 1195 stipulates (Section 34-32-113 (b) (11)) (attached Fig. 6) that "Drill holes which have encountered any aquifer in volcanic or sedimentary rock.... shall be sealed using a sealing procedure which is adequate to prevent fluid communication between aquifers". No more specific standards are mentioned. In addition, Sections 34-32-113 (h) (I) specifies cementation of aquifers which produce artesian flow to the surface. Section 34-32-113 (b) (III) specifies, in general terms, surface capping procedures.

Procedure Followed

To File
Page 4
May 28, 1985
The 1980 Drilling Program began on November 17, 1980 and ended on December 15, 1980. Copies of drilling tickets and invoices for the 1980 program were

obtained from Materi Exploration, drilling contractor on the project. Based on these documents, the program used a high-yield sodium bentonite gel with brand names of Petroplus Gel or Red Devil Gel as a hole abandonment mud. The mud was used on an average rate of .089 lbs/foot of hole. Mixing and circulating took approximately 20-30 minutes per hole.

Existing records do not indicate what the final mud weight or viscosity was. However, Bob Timmer, currently with Mobil in Midland recalled that a viscosity measuring funnel was used at least on an occasional basis. He could not recall what the character of final product was. An attachment to a 1977 letter from Charlie Greenberg to the State of South Dakota (attached, Fig. 7) described a Mobil hole abandonment procedure in which the abandonment fluid would have a weight of nine pounds per gallon and a tunnel viscosity of 45 seconds/quart.

It should be noted that in a recent telephone conversation, Marti Gardner, mud engineer with Advanced Fluid Systems, Denver indicated that, as a rule of thumb, when mixed solely with water, Petroplus Gel and Red Devil Gel are required at a rate of approximately .5 lbs/foot of hole for a five inch diameter hole in order to meet current Wyoming standards. Although this is considerably more than our 1980 usage, Bob Goble, with Western Exploration, indicated that over our 1980 usage was consistent with industry practice at the time. In addition, if we mixed the gel with natural formation mud from the drilling, we would have obtained a higher viscosity than if we had mixed the gel with water.

In his letter of April 13, 1981 (attached Fig. 8) to Linda Walker (MLR) Bruce Norton, Field Coordinator for Mobil stated that "No artesian flow was encountered in any hole. All holes were plugged from bottom to within ten feet of surface with a high viscosity drilling fluids".

A cement surface plug was installed from the top of the mud plug (ten feet below the surface) to within two feet of the surface or to the surface, depending on local cultivation practices. Invoiced cement usage of slightly more than one bag per hole is consistent with this surface plug installation.

Based on the above findings, it appears that Mobil plugged the drill holes in a manner consistent with the procedure approved by Bretz of the State Board of Land Commissioners. However, it is uncertain if it complies with the wishes of the Mined Land Reclamation Board.

1978-79 Program

Applicable Standards

Page 2 of the 1978-79 program permit (Colorado Prospecting Permit No. 665) states with regard to hole plugging:

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"In the case where drill holes in sedimentary rock produce water, sealing separate from one another, aquifers that are separate and discrete, to prevent intermingling of water".

State Mind Land Reclamation Board regulations (attached Fig. 9) apparently in effect at the time, contain the same clause as quoted above.

I have been unable to obtain any more detailed standards.

Procedure Followed

The attachments to our contract with Mineral Exploration Drilling Company, Inc. states that (attached Fig. 10) "All drill holes will be filled with drilling mud with a viscosity specified by the company before logging and cementing". In addition, the contractor was required to set a ten foot cement plug at a minimum of six feet below the surface after the hole was geophysically logged.

Two contractors worked on the 1978-79 program. They were Mineral Exploration Drilling Company, Inc. (MEDCO) and Tres Drilling, Inc. Tres was dismissed early in the program for poor performance. Invoices were obtained from MEDCO for 43,321' of the approximately 113,700' drilled. Based on these invoices, the Aqua Gel and Quick Trol were apparently used as a hole abandoment mud at a rate of .2447 lbs/ft of Aqua Gel and .0039 lbs/ft of Quik Trol. These products when used together apparently produce an abandomment mud similar to the Petrolplus Gel used in the 1980 program (Marti Gardner, telephone conversation). Thirty-three sacks of cement were indicated on the available invoices. This does not appear sufficient for the footage drilled. Presumably, the additional cement was invoiced elsewhere.

1977-78 Program

Applicable Standards

The standards applicable to this program appear to be identical to that for the 1978-79 program.

Procedure Followed

Two contractors were apparently active on this job. They were Mineral Exploration Drilling Company, Inc. (MEDCO) and Tres Drilling, Inc. Both contractors had the same address (P. O. Box 769, Ft. Collins, Colorado) and referenced the same individual (A. D. Taylor). Attachments to those contracts specified that: "All drill holes will be filled with drilling mud before logging and cementing". In addition, a ten foot cement plug was to be set a minimum of three feet below the surface, with greater minimum depths for plowed fields and for roadways (attached Fig. 11).

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Invoices and tower sheets were obtained from MEDCO (with an address now different from Tres) covering 85 of the 198 holes and 58,959 feet of the 117,000 total footage drilled. These invoices indicate a total usage of 18 bags of Quick Gel, 40 bags of beet pulp and 161 bags of cement for the 85 holes. Comparing this usage with the daily tower sheets indicates that the beet pulp and Quick Gel were used to improve circulation. The holes were apparently abandoned using only natural mud. The surface plug was then set using approximately two bags of cement per hole.

Weak artesian flow was encountered in one hole from this program (No. 10-67-16-028). Water was produced from a depth of less than 500', possibly from a sand at 350' (see attached Fig. 12). The K sand, the uppermost target sand, was reported at 950 feet in the project files. This hole was apparently amended after attempts to convert it to a water well were abandoned.

JJF/ah

J. J. Faulhaber

D. Lithologic log (Excluding information regarding mineral occurence or zonation)

Rock Units (i.e. sendstone)	Formation Name	Interval in feet	Water Encountered or circulation Lost
	Township 9 North	- Range 67 West	
Sandstone	Ogaliala	0 - 20'	
Silt, mudstone with coal seams	Laramie	201~ 3001	
Silty sandstone	Laramie and Fox Hills	~300' - 340'	
Siltstone with mudstone	Fox Hills	~340' - 400'	
			Fig. 1a
	•		
		·	·
Manufacture (Manufacture (Manuf	**************************************	- Andrews (All And	**************************************
Terminoprocessor de management	Melinado en esta en es	T Andrewsky and the second sec	do material discontinues de la constantinue de la c
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The target "sand," which has been termed the K-sand by Nufuels' personnel (RMEC's A-sand), is located near the base of the Laramie Formation (and near the top of the Fox Hills Formation) and is not a sandstone at all, but rather a muddy and sandy siltstone that is quite carbonaceous. Abundant bi-valved shell ; fragments are found slightly above, in, and below the K unit. This fossil-bearing zone can serve as a marker for the approximate stratigraphic position of the K unit, but the shells are too ubiquitous to pinpoint the mineralized portion of the unit any closer than + 40 feet. The shell fragments were found in every section of ground drilled, increasing in quantity towards the northwest. In general, the K unit contains very fine sand that is composed of quartz and feldspar. The feldspar content is usually below 10%. Although considered rare, pyrite is ubiquitous throughout the Indian Springs area, mostly occurring in the reduced strata. Trace amounts of selenite were found in the K unit as well, but only in the reduced ground. Chlorite content varied depending upon which side of the geochemical interface the hole was located and drilled. In all cases, it dropped to minor amounts or none, when drilling in oxidized ground.

Directly above the K-sand, a unit termed the J-sand occurs.

Its characteristics are identical to the K-sand. Although the J-sand is not ubiquitous throughout Mobil's lease area, it will carry uranium mineralization that is commonly ore grade,

Fig. 2

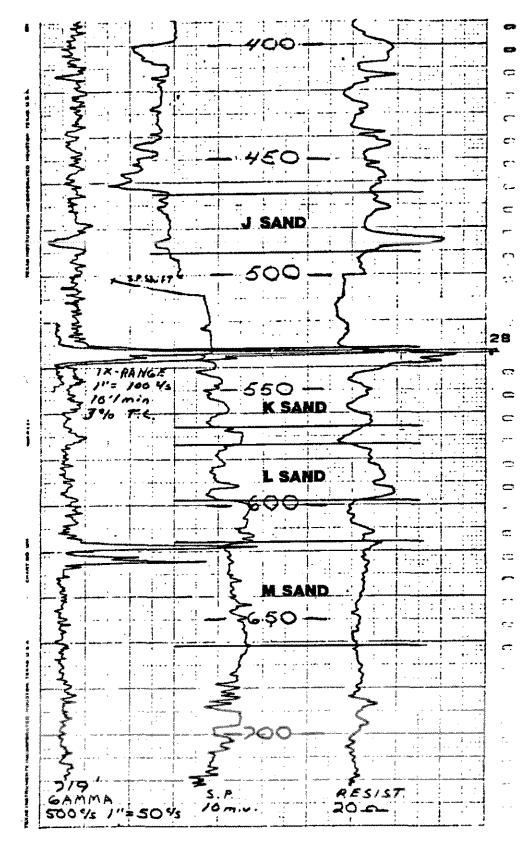


Figure 2

Sample Log Showing J-, K-, L-, and M-Sands

F19.3

Mobil proposes to use the following plugging procedures, if approved, in the permit area.

All dry holes (those encountering no aquifers) shall be plugged from bottom to within ten feet of surface with a high viscosity drill mud. From the top of this mud plug to a minimum depth compatible with local cultivation practices, a concrete surface plug shall be installed.

Any drill hole which encounters an aquifer(s) shall be plugged as follows:

High viscosity mud shall be used to plug the hole as outlined above, except for the interval(s) containing the aquifer which shall be cemented off top and bottom. A concrete surface plug shall be installed as above.

A telephone conversation with a drilling inspector from the State Engineer's Office indicated that the interval grouting procedures outlined above would satisfy their requirements regarding plugging of aquifers. Also, the procedures outlined for dry holes are designed to conform to the standards outlined in the State Engineer's Abandonment Regulations.

Plusging mathed ok least 1/12/00



E OF COLORADO SICHARD O, LAMI, GOVERNOR DEPARTMENT OF NATURAL RESOURCES Harris D. Sherman, Executive Director

MINED LAND RECLAMATION

Original to charlie Howell for filing. @3 Centennial Building, 1313 Sherman Street Denver, Colorado 80203 Tel. (303) 8393567

NAME_	BRUCE	<u> </u>	ORTON		
ADDRESS	MOBIL	014	CORP.	Energy minerals. Divisita	
	P-0.		5444		
-	Den	ev,	G .	80217	
-					

RE: Receipt of Notice of Intent to Conduct Prospecting Operations,

Time Solver

Dear	m.	Norto	<u>n_:</u>							
The	hivision of	Mined Land	Reclamation	hae r	received	VALLE	Notice	of	Intent	+0

Prospecting Operations on the following lands;

Site Name					_
Legal Description	T9;	101	RLTW	6" PM County	(Wild
Information submitted	on this	operation	has been found		
Complete	• •	No	te: drill h	cles must	be plugged is

Incomplete Surety has been: Accepted X Rejected

Compliance with House Poill 1195.
When the regulateons and diel hole reports are approved, I will forward them to Mobil.

The following information is required before the Notice can be considered complete:

Compliance with the Colorado Mined Land Reclamation Act of 1976 (34-32-101 et. seq.) and the rules and regulations adopted pursuant thereto is necessary throughout prospecting and reclamation operations. A photographic record of the site at the start of prospecting operations and after reclamation will greatly expedite release of surety.

If there are any questions, please contact us.

Walker

Not recieved

F16.5

apply to holes drilled in conjunction with a mining operation for which the board has issued a permit nor to wells or holes regulated pursuant to section 34-33-117 and to article 60 of this title or article 80, 90, 91, or 92 of title 37, C.R.S. 1973.

- (b) Drill holes sunk for the purpose of prospecting shall be abandoned in the following manner:
- (I) Any artesian flow of groundwater to the surface shall be eliminated by a plug made of cement or similar material or by a procedure sufficient to prevent <u>such artesian</u> flow.
- (II) Drill holes which have encountered any aquifer in volcanic or sedimentary rock, as aquifer is defined in section 37-90-103 (2), C.R.S. 1973, shall be sealed utilizing a sealing procedure which is adequate to prevent fluid communication between aquifers.
- (III) Each drill hole shall be securely capped at a minimum depth compatible with local cultivation practices or at a minimum of two feet below either the original land surface or the collar of the hole, whichever is the lower elevation. The cap is to be made of concrete or other material which is satisfactory for such capping. The site shall be backfilled above the cap to the original land surface.
- (IV) If any drill hole is to be ultimately used as or converted to a water well, the user shall comply with the applicable provisions of title 37, C.R.S. 1973.
- (V) Each drill site shall be reclaimed pursuant to section 34-32-116, including, if necessary, reseeding if grass or any other crop was destroyed.
- (c) Abandonment in the manner provided in paragraph (b) of this subsection (5.5) shall occur immediately following the drilling of the hole and the probing for minerals in the prospecting process. However, a drill hole may be maintained as temporarily abandoned without being plugged, sealed, or capped. However, no drill hole which is to be temporarily abandoned without being plugged, sealed, or capped shall be left in such a condition as to allow fluid communication between aquifers. Such temporarily abandoned drill holes shall be securely covered in a manner which will prevent injury to persons and animals.
- (d) No later than sixty days after the completion of the abandonment pursuant to paragraph (b) of this subsection (5.5) of any drill hole which has artesian flow at the surface, the person conducting the prospecting shall submit to the director of the division of mined land reclamation within the department a report containing the location of such hole to within two hundred feet of its actual location, the estimated rate of flow of such artesian flow (if such is known), and the facts of the technique

MOBIL OIL CORPORATION ENERGY MINERALS - U.S. & CANADA ble 1977 from Charlie
Corenhung to Stake of South Dakon
(For Hills Notice of Inhat)
Referred to in letter as "our
Procedures"

HOLE ABANDONMENT AND PLUGGING PROCEDURES

Normal Abandonment

A drilling fluid containing sodium bentenite and other hole conditioning and stablizing materials, including the cuttings that remain in suspension, will be left in each hole to surface. Drill site tests performed by the drill crews will insure that the abandonment fluid, by the addition of high yield sodium bentonite, meets ar exceeds the following specifications.

Weight - 9 pounds per gallon Funnel Viscosity - 45 seconds/quart (These tests shall be performed in accordance with accepted A.P.I. procedures.)

The weight of the resulting high gel-strength fluid in the hydrostatic column will be sufficient to confine any water encountered to the nest formation, with the exception of artesian flow to surface.

Artesian Abandonment

In event of artesian flow of ground water on the surface, each artesian aquifer will be isolated by a continuous cement plug starting 50 feet below the aquifer and extending across and above the aquifer to a height sufficient to stop the flow (a minimum of 10 feet). Any remaining flowing aquifers above will be isolated in the same manner. The portions of the hole between plugs will be filled with drilling fluid meeting the above specifications. Should the hole contain a surface string of casing, a 100 foot plug shall be centered across the shoe of the casing. The casing shall be cut off at a depth of 6 feet below the surface and the top 10 feet filled with cement.

Isolation of High Saline or Mineralized Zones

zones of usable-quality water shall be isolated from zones of
saline or mineralized water by the installation of a 100 foot
cement plug centered across the top of the saline zone. The
remainder of the hole shall be filled with drilling fluid and
plugged in the manner outlined below.

Surface Plugging

Jpon completion of all drilling and logging operations, the hole will be filled with drilling mud. A 10 foot cement plug will be placed in each hole, the top of which will be located three feet below the surface. The surface location of each hole will be marked with a wooden stake with identifying number attached.

Mobil Abandonment Jurelunes f F16. 7

Nufuels Corporation

PO BOX 5444 DENVER COLORADO 80217

April 13, 1981

RECEIVED

Mined Land Reclamation
Department of Natural Resources
423 Centennial Building
4313 Sherman Street
Denver, Colorado 80203

Attention: Linda Walker

AFR 1 4 1981

MINED LAND RECLAMATION Colo. Dept. of Natural Resources

NOTICE OF COMPLETION OF PROSPECTING OPERATIONS

Gentlemen:

Mobil's 1980 drilling program on the Indian Springs Project has been completed. A total of 109 exploratory holes were drilled in Townships 9 north and 10 north, Range 67 west. No artesian flow was encountered in any hole. All holes were plugged from bottom to within ten feet of surface with a high viscosity drilling fluid. From the top of this mud plug to a minimum of two feet below surface, a cement plug was installed. In cultivated land, the remaining two feet were backfilled with topsoil. In grazing land, this cement plug was installed to the ground surface to prevent injury to livestock.

Reclamation was completed February 12th and consisted of cleaning each site of cuttings and debris, and, where necessary, recontouring disturbed areas. Reseeding will be accomplished using a mixture of buffalo grass and blue grama, and will commence the last part of April, weather permitting.

Hole location reports will be submitted when forms have been received from your office. If there are any questions regarding our drilling program or reclamation, please contact me at 572-2622. Thank you for your cooperation during our program.

Very truly yours,

Buc Norton

Bruce A. Norton Field Coordinator

BAN:bb

L. hadal at

F19.8

1	43	Dispersing	or bur	vino	materials	removed	from	300	hola-
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(5) Backfilling and revegetating any pits; and

- (6) In the case where drill holes in sedimentary rock produce water, sealing separately from one another. aquifers that are separate and discrete so as to prevent intermingling of water.
- 5.32 The prospecting operation shall be conducted so as to minimize adverse effects upon wildlife.
- 113(4)

 5.33 Upon filing the Notice of Intent to Conduct Prospecting, the person shall post surety in an amount determined by the Board not to exceed two thousand dollars per acre of the land to be disturbed, or shall post a statewide bond. If a statewide prospecting surety is posted, the person posting the surety must otherwise comply with the provisions of this section for every area to be prospected. (Further information on surety procedures may be found in RULE 7.)
- 113(5)

 5.34 Upon completion of the prospecting, there shall be filed with the Board a Notice of Completion of Prospecting Operations.

 Within ninety (90) days after the filing of the Notice of Completion the Board shall notify the person who had conducted the prospecting operations of the steps necessary to reclaim the land. (In most cases this will simply involve a conference to discuss the reclamation plans outlined in the Notice of Intent previously submitted by that person.)
- 113(6)
 5.35 The Board shall inspect the lands prospected within thirty (30)
 days after the person prospecting the lands completes the
 reclamation and notifies the Board that the reclamation is
 finished. If the Board finds the reclamation satisfactory, the
 Board shall release the surety.
 - 5.36 The surety shall not be held for more than thirty (30) days after the completion of the reclamation.
 - 5.37 All prospecting operations shall be conducted in such a manner as to comply with all applicable state and federal air and water quality laws and regulations, the 1976 Act, and these Rules and Regulations.

F16. 9

113(7)

HOURLY (DAYWORK) RATES

Operating time (cementing (subsurface plugs), running casing, redrilling, circulating.

\$ 90.00 per hour.

Operating time for coring with company providing coring equipment.

\$ 90.00 per hour.

Standby time with crew (waiting on orders, waiting on Mobil - provided materials, waiting on cement to set) - \$ 65.00 per hour.

OTHER PROVISIONS

- Contractor will furnish trash cans on each driller's pickup. Contractor will not permit drill crews to bury any trash or junk, or allow bags, rags, or trash of any type to blow away from locations.
- 2. Company will arrange for water. If water hauls are over ten miles round-trip, Company will pay Contractor \$0.25 per mile for excess mileage. Rig stand-by time due to long water hauls will not be paid, except in the case that lost circulation conditions are encountered.
- All drill holes will be filled with drilling mud with a viscosity specified by the Company before logging and cementing.

Contractor will be responsible for plugging all holes upon notification by Company that an adequate downhole electric log has been obtained.

Drill hole abandonment procedures require setting of a ten (10) foot cement plug at a minimum of six (6) feet below the surface. For holes drilled in roadways, the plug must be a minimum of eight (8) feet below surface. The surface location of each drill hole will be marked by a length of nylon line set in the cement plug and extending at least one (1) foot on the surface.

In the event artesian conditions are encountered at any time the Contractor will be responsible for control of the flow. The Contractor must be capable of mixing a standard cement slurry and pumping the slurry through drill pipe to a depth specified by the Company.

HOURLY (DAYWORK) RATES

Operating time with crew (coring, cementing, (subsurface plugs), running casing, redrilling, circulating) - \$ 80 per hour.

standby time with crew (waiting on orders, waiting on Mobil-provided materials, waiting on coment to set) - \$ 60 per hour.

IT IS FURTHER AGREED AND UNDERSTOOD THAT THE FOLLOWING SPECIAL PROVISIONS WILL APPLY THROUGHOUT THE TERM OF THIS CONTRACT:

- Contractor will furnish trash cans on each driller's pickup. Contractor will not permit drill crews to bury any trash or junk, or allow bags, rags, or trash of any type to blow away from locations.
- 2. Company will arrange for water. If water hauls are over ten miles round-trip, Company will pay Contractor \$0.25 per mile for excess mileage. Rig stand-by time due to long water hauls will not be paid, except in the case that lost circulation conditions are encountered.

Contractor will submit to Mobil's Representative a daily water haul and mileage record on an approved form.

3. All drill holes will be filled with drilling mud before logging and cementing.

Contractor will be responsible for plugging all holes upon notification by Company that an adequate downhole electric log has been obtained.

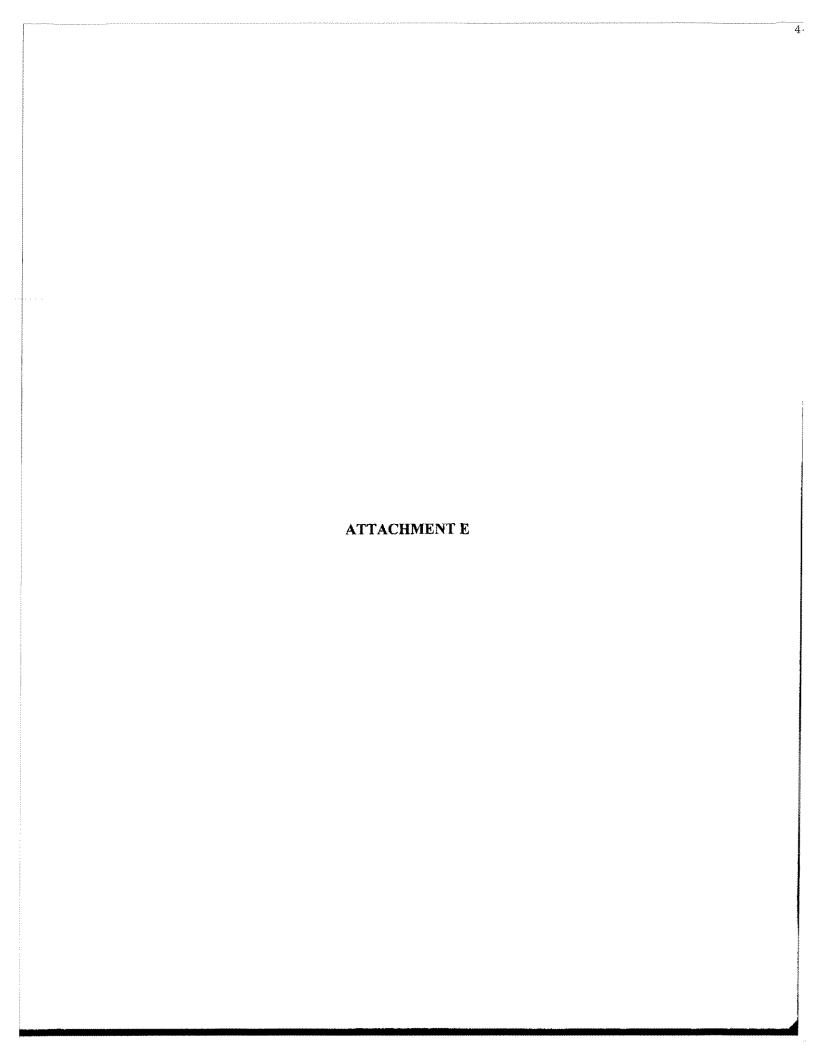
Drill hole abandonment procedures require setting of a ten (10) foot cement plug at a minimum of three (3) feet below surface. Holes drilled in cultivated fields require the plug to be set a minimum of six (6) feet below surface. For holes drilled in roadways, the plug must be a minimum of eight (8) feet below surface.

Company will reimburse contractor at cost for all coment used, but will not reimburse contractor for the time or labor necessary to plug the holes, as this is included in the footage (turnkey) rate.

4. Footage charges will be based on probed dcpth if the hole is probed within 1-1/2 hours of the pipe being retrieved out of the hole.

In the event the hole can not be probed to the drilled depth within the one-and-one-half hour time period, through no fault of Company or logging operator, Contractor will wash the hole out at his sole expense, or drill a new hole at Contractor's sole expense, at Contractor's discretion.

Fig. 11





DEPARTMENT OF NATURAL RESOURCES

O. Monte Pascoe, Executive Director

MINED LAND RECLAMATION DIVISION

DAVID C. SHELTON Director

February 23, 1982



Mr. Kenneth Holmes
Mobil Oil Corporation
P.O. Box 5444
Denver, Colorado 80217

Dear Mr. Holmes:

The Division has received Nufuels Corporation's drill hole abandonment forms for the Indian Springs drilling program.

Clarification is needed in the area of aquifer protection.

It is our understanding that the Laramie-Fox Hills aquifer is found between the Laramie and Fox Hills formations. This is potable water which is artesian in that it rises above its own formation. There are possible contaminants found in the Laramie formation, which should not be allowed to enter this aquifer. There did not seem to be any mention made of the aquifer. Was it unnoticeable in drilling? Also, drilling mud does not have the same characteristics as abandonment fluid in protecting aquifers. Can you assure the Division that the drilling mud will protect the aquifer?

The Division would appreciate a written response to these issues.

Let me know if an inspection is needed to release surface reclamation for the Indian Springs Notice of Intent, dated 10/27/80. I inspected some of the work done for the Indian Springs project in the fall of 1980. Another trip will only be necessary if access roads or large (greater than 1600 square feet) drill sites were disturbed and reclaimed since that last inspection. Also, please clarify whether the Notices dated 8/23/77 and 11/10/78 should be released.

Sincerely,

Linda Walker

Reclamation Specialist

Linda Walker

LW/mt

STATE OF COLORADO

DIVISION OF MINERALS AND GEOLOGY

Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106

November 6, 2003

ExxonMobil Refining and Supply Company Downstream-Safety, Health & Environment Mr. Mark Hoffman-Project Manager 3225 Gallows Road Fairfax, VA 22031

RE: Indian Springs Prospect; DMG File # P-1980-090

Dear Mr. Hoffman:

You submitted a request for a full performance and financial warranty release request for the Indian Springs Prospect on May 19, 2003. The site was inspected with Louis Miller of MFG Consultants on September 17, 2003. The result of that inspection was that reclamation had been completed in accordance with the requirements of the Notice of Intent, Rules and Regulations and the Act. Therefore, this site is released from all applicable performance and financial warranties associated with reclamation at this site.

Since this is just one of the activities covered under Statewide Prospecting Bond No. 17-003-193, the bond is not eligible for release at this time. However, when all of the prospects associated with this bond are fully reclaimed and released, the bond will be eligible for final release at that time.

If you have any questions about this file or any other aspect of the bond, please contact me at (303) 866-4926.

Sincerely,

Anthony J. Waldron

Environmental Protection Specialist

cc: Suzi Ericksen-DMG

Louis Milller- MFG



Bill Owens Governor

Greg E. Walcher Executive Director

Ronald W. Cattany Division Director Natural Resource Trustee