

FILE NOTATIONS

Entered in MID File ✓
 Location Map Filled ✓
 Card Indexed ✓

Checked by Chief *FWB*
 Approval Letter *6-25-74*
 Disapproval Letter

COMPLETION DATA:

Date Well Completed *7-15-74*
 W..... WW..... TA.....
 O..... OS..... PA.....

Location Inspected
 Bond released
 State or Fee Land

LOGS FILED

Miller's Log..... ✓
 Electric Logs (No.) *N.R.*
 I..... Deal I Lat..... GR-N..... Micro.....
 MC Sonic GR..... Lat..... MI-L..... Sonic.....
 CLog..... CLog..... Others.....

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

5. Lease Designation and Serial No.
29648

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
 DRILL DEEPEN PLUG BACK
 b. Type of Well
 Oil Well Gas Well Other
 Single Zone Multiple Zone

6. If Indian, Allottee or Tribe Name
No

7. Unit Agreement Name
No

8. Farm or Lease Name
No

2. Name of Operator
Needle Exploration Company, Inc.

9. Well No.
Needle Expl. # 1

3. Address of Operator
P.O. Box 143 Ely, Nevada 89301

10. Field and Pool, or Wildcat
Wildcat

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
 At surface
See attached plat
 At proposed prod. zone
CSENW

11. Sec., T., R., M., or Blk.
 Sec. **46**, T. **24S**, R. **19W**
Millard Co. S.L.M.

14. Distance in miles and direction from nearest town or post office*
17 miles from Garrison Utah

12. County or Parrish
Millard

13. State
Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) **1980 Ft.**

16. No. of acres in lease **640**

17. No. of acres assigned to this well **40**

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. **1500 Ft.**

19. Proposed depth **10,000 Ft.**

20. Rotary or cable tools **Both**

21. Elevations (Show whether DF, RT, GR, etc.)
5268.12 GR.

22. Approx. date work will start*
June 3, 1974

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
14 in.	10.75	42#	1500 ft.	500 sxs. or to surface

0 - 1500 ft. - Drill 14 in. hole with a 28L cable tool rig and set 1500 ft. 10.75 in. casing.

1500 - T.D. - Move a rotary rig onto 1500 ft. hole and continue drilling with a lightly treated gel/water drilling fluid. 7.875 in. bits will be used to T.D. Hydrolic Preventers will be in use below 1500 ft. The purpose of this well is to test the formation known as the Devonian Guillmette Formation.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed **Larry A. Newman** Title **President** Date **25 May 1974**

(This space for Federal or State office use)

Permit No. **13-027-30007** Approval Date _____

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

T.24 S., R.19 W., S.L.B. & M.

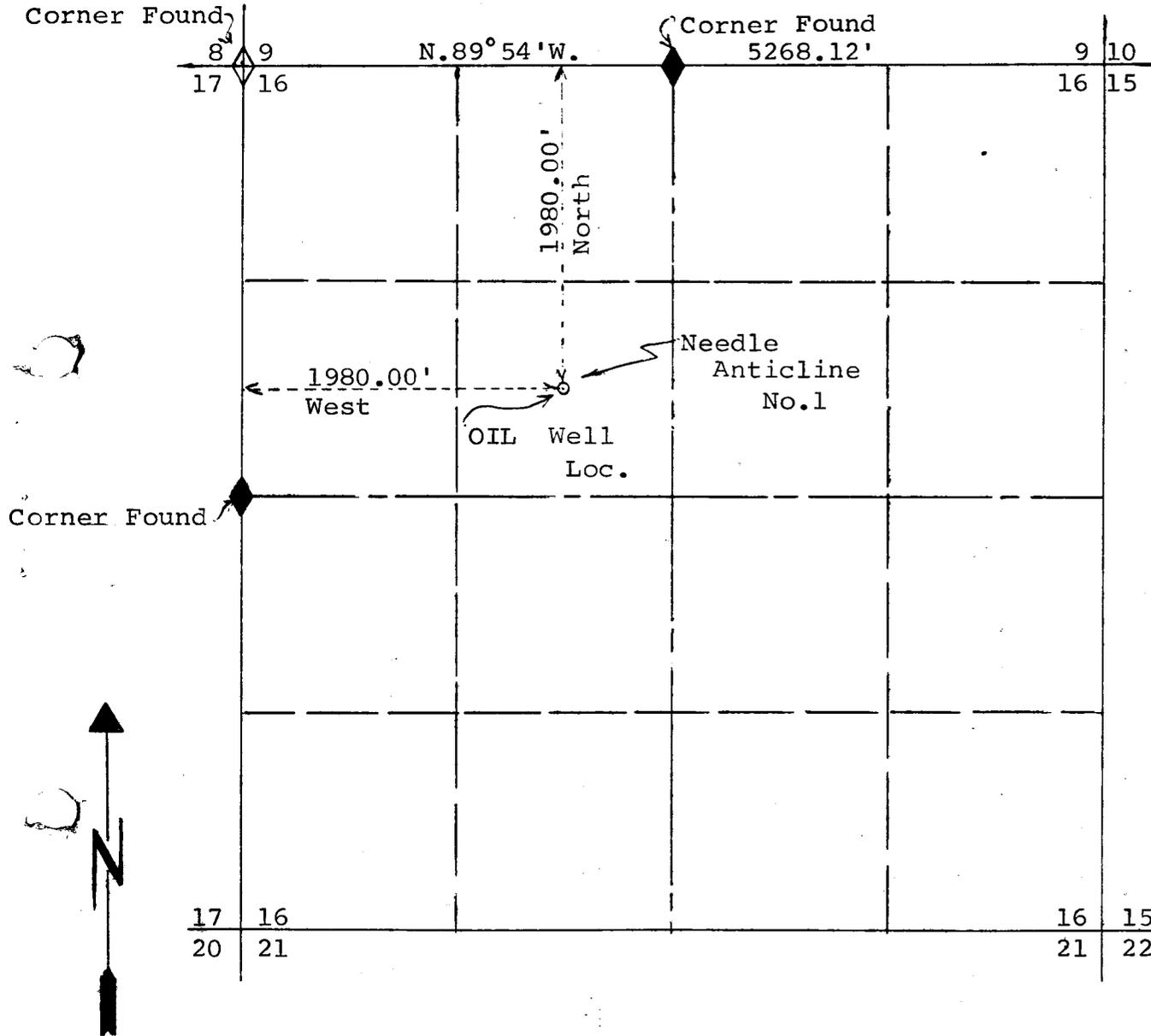
CERTIFICATION

I, Richard W. Forman, do hereby certify that this plat is a true and accurate map of the survey made under my supervision and direction between the 7th and 8th day of October, 1974.

Richard W. Forman

Richard W. Forman
Licensed Land Surveyor
Nevada No. 2898

Map Showing
NEEDLE EXPLORATION COMPANY
Oil Well Location
Needle Anticline No. 1
Millard County Utah
Scale 1" = 1000'



June 25, 1974

Needle Exploration Company
Box 143
Ely, Nevada 89301

Re: Well No. Needle State #1
Sec. 16, T. 24 S, R. 19 W,
Millard County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the General Rules and Regulations and Rules of Practice and Procedure. Said approval is, however, conditional upon the following:

- 1) Setting a minimum of 150' of surface casing with cement circulated to surface.
- 2) When drilling with a cabletool rig, a minimum gate-valve type blowout preventer must be utilized.
- 3) When drilling with a rotary rig, a minimum of a blind and pipe ram blowout preventer must be utilized.
- 4) This Division must be notified when logging, coring, drill-stem testing, running casing, cementing, etc., in sufficient time for said work to be witnessed by a member of this staff.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following prior to any abandonment work:

PAUL W. BURCHELL - Chief Petroleum Engineer
HOME: 277-2890
OFFICE: 328-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation relative to the above will be greatly appreciated.

Needle Exploration Company
June 25, 1974
Page Two

The API number assigned to this well is 49-027-30007.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sw

cc: Division of State Lands
Attn: Charles Hansen, Director
Room 105 - State Capitol Building
Salt Lake City, Utah 84114

July 11, 1974

Needle Exploration Company
Box 143
Ely, Nevada 89301

Re: Well No. Needle State #1
Sec. 16, T. 24 S, R. 19 W,
Millard County, Utah

Gentlemen:

With reference to the above referred to well, your attention is again directed to the stipulations set forth in our approval letter of June 25, 1974, a copy of which is attached.

As indicated, it is required that a member of this staff be present for the setting of casing, cementing, logging, etc. Failure to comply with this stipulation will necessitate in our taking appropriate legal action.

In addition, we are enclosing forms for your convenience in submitting your "Monthly Report of Operations" as outlined under Rule C-22 of the General Rules and Regulations and Rules of Practice and Procedure.

Further, as indicated in my inspection memorandum of July 2, it will be necessary for you to construct a disposal pit on location.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sw
Attachments

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Handwritten initials and marks

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML-29648
2. NAME OF OPERATOR		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N.A.
3. ADDRESS OF OPERATOR		7. UNIT AGREEMENT NAME N.A.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 17 miles South of Garrison Ut.		8. FARM OR LEASE NAME N.A.
14. PERMIT NO. 43-027-30009	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5268 Gr.	9. WELL NO. Needle Anticline #1
		10. FIELD AND POOL, OR WILDCAT wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA sec 16 T24S. R. 19W. S.L.M.
		12. COUNTY OR PARISH Millard
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(Other) <i>continue drilling operations</i>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

As of July 26, 1974, we are reaming a 10" hole with a 16" cable tool bit, in order to set 300' of 14" casing. We are now reaming at 250'

18. I hereby certify that the foregoing is true and correct

SIGNED Samy A. Newman TITLE President DATE 26 July 1974

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

November 18, 1974

Needle Exploration Company
P.O. Box 143
Ely, Nevada 89301

Re: Well No. Needle State #1
Sec. 16, T. 24 S, R. 19 W,
Millard County, Utah

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" and electric and/or radioactivity logs for the above referred to well are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible. If electric and/or radioactivity logs were not run please make a statement to this effect in order for us to keep our records accurate and complete.

Your cooperation relative to the above will be greatly appreciated.

Very truly yours

DIVISION OF OIL & GAS CONSERVATION

SCHEREE WILCOX
EXECUTIVE SECRETARY

:sw

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

(See other instructions on reverse side)

7 6 p2

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other WATER

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
NEEDLE EXPLORATION COMPANY, INC.

3. ADDRESS OF OPERATOR
P.O. BOX 143, ELY, NEVADA 89301

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface center of SE 1/4 of NW 1/4 of Sec. 16, T24S R. 19W.
At top prod. interval reported below =
At total depth =

5. LEASE DESIGNATION AND SERIAL NO.
29648

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
N.A.

8. FARM OR LEASE NAME
N.A.

9. WELL NO.
NEEDLE STATE #1

10. FIELD AND POOL, OR WILDCAT
WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
SEC. 16, T. 24 S., R. 19 W.

12. COUNTY OR PARISH
MILLARD

13. STATE
UTAH

14. PERMIT NO. 43-027-30007 DATE ISSUED 6/25/74

15. DATE SPUNDED 6/26/74 16. DATE T.D. REACHED 7/15/74 17. DATE COMPL. (Ready to prod.) _____ 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5268 GR. 19. ELEV. CASINGHEAD _____

20. TOTAL DEPTH, MD & TVD 376' 21. PLUG, BACK T.D., MD & TVD _____ 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS _____ CABLE TOOLS 0-376

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
NO 25. WAS DIRECTIONAL SURVEY MADE
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN
NO LOGS RUN 27. WAS WELL CORRED
NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<u>7"</u>	<u>20#/ft</u>	<u>350'</u>	<u>10"</u>	<u>NONE</u>	<u>0</u>

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
<u>-</u>				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
<u>-</u>		

31. PERFORATION RECORD (Interval, size and number)
N.A.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<u>N.A.</u>	

33.* PRODUCTION

DATE FIRST PRODUCTION N.A. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) _____ WELL STATUS (Producing or shut-in) TA

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS _____

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED James A. Newman TITLE PRESIDENT DATE 28 NOV. 1974

*(See Instructions and Spaces for Additional Data on Reverse Side)

FORM OGC-8-X
File in Quadruplicate

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS CONSERVATION
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name and Number NEEDLE ANTICLINE #1

Operator NEEDLE EXPLORATION CO., INC.

Address BOX 143 ELY, NEVADA 89301

Contractor SAME

Address SAME

Location SE 1/4, NW 1/4; Sec. 16; T. 24 S; R. 19 W, MILLARD County.

Water Sands:

	<u>Depth:</u> From - To -	<u>Volume:</u> Flow Rate or Head -	<u>Quality:</u> Fresh or Salty -
1.	<u>240' - 258'</u>	<u>BAILED 1200 gals. in APPROX. 10 MIN. - NO DROP in FLUID LEVEL</u>	<u>FRESH</u>
2.			
3.			
4.			
5.			

50 gals
Prof. water

(Continue on Reverse Side if Necessary)

Formation Tops:

NOTE: (a) Upon diminishing supply of forms, please inform this office.
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
(c) If a water quality analysis has been made of the above reported zone, please forward a copy along with this form.

Individual Well Summary

Well Name: Needle State # 1

API No: 43-027-30009

Location: 1980' FNL, 1980' FWL, Sec. 16, T. 24S, R. 19W, Millard County, Utah.

Initial Operator: Needle Exploration Corp., Larry A. Newman, President.

Current Operator: Commodore Resources Corp., 150 E. 58th Street, Suite 3400, N. Y., N. Y. 10155.

Has never accepted operator ship but holds bond on the lease in the name of Ensign Gas and Oil (merged) and used well for water during drilling of 1-B well.

Lease No.: ML-29648, expired 7-5-83.

Well Status: Shut in. Has been used as water well as indicated by wires from electric pump still down hole, however, according to the Division of Water Rights it was never permitted as a water well and therefore must be plugged under the lease bond.

Inspection History:

7-8-74 Inspected by Cleon B. Feight, Director. Rig toppled over, well spudded, conductor set and no pit to catch fluids. No appropriate reports received.

5-15-85 Inspected by Dorothy Swindel and John Baza. Submersible pump in well. Well has not been used in years.

9-11-86 Inspected by William Moore. Submersible pump still in hole, wires and ropes protruding.

2-27-91 Inspected by John Berrier and Mike Hebertson. The pits are open and oil field related equipment remains on the location. Well is open and a piece of rope, electric wire, and PVC pipe hanging in the top of the well.

Individual Well-Summary (cont'ued)

Correspondence History:

5-25-74 APD submitted by Needle Exploration Co.

6-25-74 APD approved by DOGM.

7-11-74 Letter to Needle Exp. from DOGM for lack of witnessing of casing, cementing and logging, lack of Monthly Reports, and need to construct a disposal pit to catch fluids.

11-18-74 Letter to Needle Exploration from DOGM for lack of Completion Reports and logs.

11-23-74 Well Completion: As water well.
(Never permitted through Division of Water Rights).

12-27-74 Report of water encountered.

8-24-78 Letter to Needle Exploration from DOGM for status report.

4-7-82 Lease assigned to Commodore on 6-8-80 and accepted by Commodore (In lease files).

10-3-86 Conversation: William Moore, DOGM with Mary Erwin, Commodore Geologist indicating they were not aware of the well left on the lease.

12-3-86 Conversation: Carl Dearden, local rancher with William Moore, DOGM. Water well and pump belong to company that drilled 1-B well, and that he is submitting a bid to do the plugging and reclamation work.

12-3-86 Conversation: William Moore, DOGM with Bob Berger, Div. of Water Rights that well was never appropriated for water through their Division as required.

12-3-86 Conversation: William Moore, DOGM with Mary Erwin, Commodore Geologist regarding plugging orders for 1-B and # 1 wells.

Problem Summary:

Well needs to be PA'D as it has not been appropriated as a water well under the Division of Water Rights. Plans to do so fell through when Commodore decided they were not responsible for the plugging of any wells drilled before Chapter 11 bankruptcy in 1982.

Recommended Action:

Plug the well and reclaim the location using the lease bond on file with State Lands and Forestry along with the 1-B well.



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

CLEON B. FEIGHT
Director

I. DANIEL STEWART
Chairman

CHARLES R. HENDERSON
JOHN L. BELL
THADIS W. BOX
C. RAY JUVELIN

August 24, 1978

Needle Exploration Company, Inc.
P.O. Box 143
Ely, Nevada 89301

Re: Well No. Needle State #1
Sec. 16, T. 24S, R. 19W
Millard County, Utah

Gentlemen:

In the process of updating this Divisions Water Well files, it was noted that we have not received any recent status notification on the above mentioned well.

In order to keep our records accurate and up-to-date, please complete the enclosed form OGC-1b, in duplicate, and forward them to this office as soon as possible.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, & MINING

Tammy Edge
Typist



STATE OF UTAH
NATURAL RESOURCES & ENERGY
State Lands & Forestry

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Ralph A. Miles, Division Director

3100 State Office Building • Salt Lake City, UT 84114 • 801-533-5381

June 8, 1982

Commodore Resources Corporation
57 West 200 South
Suite 503
Salt Lake City, UT
84101

Gentlemen:

RE: ML 29648 *43-077-30009*

The Director, on April 12, 1982, approved assignment of the above-numbered lease to you by Reef Oil Corporation. No override, but subject to 5 percent overriding royalty previously reserved.

The State assumes no responsibility in collecting or distributing overriding royalty.

Our records have been noted and we herewith enclose the original lease and the original assignment.

Yours very truly,

Donald G. Prince

DONALD G. PRINCE
ASSISTANT DIRECTOR

bp

Enclosures

INSTRUCTIONS: Assignment must be submitted in duplicate. The original certificate, grazing lease or mineral lease must be produced with the assignment. Partial assignment permitted on mineral leases only. Total assignment -- \$10.00, Interest Assignment--\$10.00, Partial Assignment -- \$15.00.

ACCEPTANCE OF ASSIGNMENT
(Corporate)

43027-30009
N/A
CERTIFICATE NO.
N/A
GRAZING LEASE NO.
29648
MINERAL LEASE NO.

Comes Now COMMODORE RESOURCES CORPORATION, a corporation of UTAH

AND HEREBY ACCEPTS THE ASSIGNMENT FROM G.L. Durrett, President
of Reef Oil Corporation

Certificate No. N/A, GL No. N/A, ML No. 29648, which assignment is dated June 8, 1980, subject to all of the covenants and obligations of said Lessee.

IN WITNESS WHEREOF Raymond A. Diaz has executed this acceptance this 7th day of April, 19 82
(Officer, Agent, Attorney in fact)

[Signature]
(Assignee)
BY: Raymond A. Diaz
(Officer, Agent, Attorney-in-Fact)
Executive Vice President
and General Counsel

ASSIGNEES ACKNOWLEDGEMENT

STATE OF UTAH)
) : ss
COUNTY OF SALT LAKE)

On this 7th day of April, 19 82, personally appeared before me Raymond A. Diaz and _____, who being by me duly sworn did say, each for himself, that (he, she, or they) he is an officer, agent or Attorney in fact for the assignee and is authorized to accept this assignment and has executed the same and the seal affixed is the seal of said corporation.

MY COMMISSION EXPIRES September 25, 1983

[Signature]
NOTARY PUBLIC, Residing at:
Salt Lake City, Utah
DIVISION OF STATE LANDS
STATE OF UTAH
1982 APR -8 PM 3:07

FILED

ASSIGNMENT

43-027-30009

CERTIFICATE NO. N/A
GRAZING LEASE NO. N/A
MINERAL LEASE NO. 29648

APPLICATION NO. _____

The undersigned, as owner of record title interest as hereinafter specified in and to ML 29648; GL N/A; Certificate No. N/A as designated, for good and valuable consideration and _____ DOLLARS does hereby assign to COMMODORE RESOURCES CORPORATION ADDRESS: 57 West 200 South, Suite #503, Salt Lake City, Utah 84101 The rights, title, and interest in rights and privileges as lessee in such lands, to the extent indicated, subject to the reservation of overriding royalties as herein noted:

1. Land affected by this assignment in County of Millard, State of Utah. Described herein as:

Township 24 South, Range 19 West SLM

Section 16 - ALL

- | | | |
|--|------------|-------------|
| | <u>640</u> | ACRES |
| 2. Interest of assignor in such lands | | <u>100%</u> |
| 3. Extent of such interest conveyed to Assignee (Note percentage of 2.) | | <u>100%</u> |
| 4. Overriding royalty reserved herein to Assignor (Note percentage only) | | <u>None</u> |
| 5. Overriding royalty previously reserved (Note percentage only) | | <u>5%</u> |

It is hereby certified that the statements made herein are true, complete, and correct to the best of the undersigned's knowledge and belief and are made in good faith.

Executed and witnessed this 6th day of April, 19 82.

WITNESS:

[Signature]

X G.L. Durrett
(Lessee--Assignor)

LESSOR--ASSIGNOR'S ACKNOWLEDGEMENT

G:L. Durrett, President
Reef Oil Corporation
P.O. Box 143
Ely, Nevada 89301

STATE OF UTAH)
) ss.
COUNTY SALT LAKE)

On the 6th day of April, A.D. 19 82, personally appeared before me G.L. Durrett, signer (s) of the above instrument, who duly acknowledged to me that (he, she, they) he executed the same.

[Signature]
My Commission Expires: OCT 23rd 1984

West Jordan ut.
Notary Public--Residing at:

INDIVIDUAL'S ACCEPTANCE OF ASSIGNMENT
AFFIDAVIT OF CITIZENSHIP OF ASSIGNEE

I, (we) _____ on oath, do solemnly swear that I am (we are) at the present time (a) * _____ Citizen (s) of the United States of America and of legal age, and I (we) hereby assume and agree to perform all of the covenants and obligations of said lease on the part of the lessee (s) to be kept and performed, and accept the foregoing instrument.

BY: _____

Subscribed and sworn to before me this _____ day of _____, 19 _____.

My Commission Expires: _____

Notary Public--Residing at: _____

NOTE: a* Insert here whether native born or naturalized. If naturalized, it will be necessary to file with this office Proof of Citizenship or Declaration of Intention to become a citizen in the form of a letter or certificate of verification from Court of Issuance, and registration fee of \$1.00.

THIS DOCUMENT MAY BE DUPLICATED ASSIGNMENT APPROVED [Signature]

APR 12 1982

DIVISION OF STATE LANDS

COMMODORE

July 11, 1989

Commodore Environmental
Services, Inc.

57 West South Temple
Suite 410
Salt Lake City, Utah 84101-1504
(801) 521-6400

Division of State Lands and Forestry
Suite 400, #3 Triad Center
Salt Lake City, Ut 84180-1204

801-355-7260

Re: ML 29648 43-027-30009

Att: Edward Bonner

Dear Mr. Bonner:

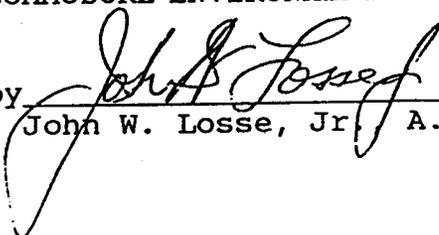
In accordance with instructions of Mr. Johnson of the Minerals Division and your secretary I am writing to request release of 9 7/8% Treasury Note in the amount of \$5000.00, receipt of which was acknowledged by letter of the Division of State Lands, Department of Natural Resources, dated August 1, 1980, and signed by P.D. Miller. Mr. Johnson has confirmed that said Note is in his possession, and that referenced lease has expired.

Commodore Environmental Services, Inc. is the surviving corporate entity of Ensign Oil and Gas Company. Ensign was merged into Commodore Resources Corporation on November 21, 1980 by an exchange of stock. Following Chapter 11 Bankruptcy proceedings in 1982 and 1983, Commodore's name was changed to Commodore Environmental Services, Inc. on June 27, 1987.

This office continues to serve Commodore in connection with predecessor stock exchanges and various oil and gas and mineral matters.

Very truly yours,

COMMODORE ENVIRONMENTAL SERVICES, INC.

by 
John W. Losse, Jr. A.S.

JWL:lpm



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

43-027-30011

OPS

REPRODUCTION

March 13, 1991

Mr. John W. Losse, Jr.
Commodore Environmental Services, Inc.
57 West South Temple, Suite 410
Salt Lake City, Utah 84101-1504

Dear Sir:

Re: State Lease ML 29648 e: 43-027-30009

Mr. Ed Bonner has requested I write you regarding the bond release on the referenced lease. The bond cannot be released until the Needles Anticline #1-B well is plugged, the location leveled, and a marker installed. Plugging and abandonment is covered in the Oil and Gas Conservation General Rules R615-3-24.

In order to facilitate this matter, I have attached a plugging program for the well. The Oil and Gas Division should be notified 24 hours prior to the beginning of the work at 538-5340. We will be happy to assist you in any way we can.

Yours truly,

Frank R. Matthews
Petroleum Engineer

ldc
cc: Ed Bonner, State Lands & Forestry
R.J. Firth, Associate Director, Oil and Gas

WO11

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File _____

Suspense
(Return Date) _____
(To - Initials) _____

Other
Open File

(Location) Sec. _____ Twp. _____ Rng. _____
(API No.) 43-027-30009

1. Date of Phone Call: 8-16-93 Time: 2:35

2. DOGM Employee (name) J. Cordova (Initiated Call
Talked to:

Name Jenny (Initiated Call - Phone No. (801) 530-4849
of (Company/Organization) Div. of Corporations

3. Topic of Conversation: Needle Exploration Company & Commodore Resources Corp.

4. Highlights of Conversation: _____

No Listing - Both Companies.

* St. Yards / ML-29648 (CD on file for both wells #1 & #1-B)

931122 / Ed Bonner will follow-up & call back. (No add'l info.)

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

JOHN LOSSE, JR
 COMMODORE RESOURCES CORP
 300 S 350 W
 SALT LAKE CITY UT 84110

UTAH ACCOUNT NUMBER: N9750

REPORT PERIOD (MONTH/YEAR): 10 / 93

AMENDED REPORT (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
4302730011	11178	24S 19W 16						
TOTALS								

COMMENTS: * Address update to Federal Resources Group / John Losse Jr.
on 10-94. 57 W. South Temple, Suite 410
S.L.C. Ut. 84101-1504 (801) 355-7260

I hereby certify that this report is true and complete to the best of my knowledge. Date: _____
 Name and Signature: _____ Telephone Number: _____

OPERATOR COMMODORE RESOURCES CORP.

OPERATOR ACCT. NO. N 9750

ADDRESS _____

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				SPUD DATE	EFFECTIVE DATE	
					QQ	SC	TP	RG			COUNTY
D	99998	11593	43-027-30009	NEEDLE STATE #1	SEW	16	24S	19W	MILLARD	6-26-74	4-12-82

WELL 1 COMMENTS: *EFFECTIVE DATE-DATE OF LEASE ASSIGNMENT TO COMMODORE RES.

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:

WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

L. CORDOVA (DOG M)

Signature

ADMIN. ANALYST

Title

1-6-94

Date

Phone No. ()

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-LEC	7-PL
2-DTB	8-SJ
3-VLC	9-FILE
4-RJF	
5-FRM	
6-LEC	

Attach all documentation received by the division regarding this change.
 Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (well sold) Designation of Agent
 Designation of Operator Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 4-12-82)

TO (new operator) COMMODORE RESOURCES CORP. FROM (former operator) NEEDLE EXPLORATION COMPANY
 (address) C/O FEDERAL RESOURCES GROUP-JOHN LOSSE JR. (address) BOX 143 (INVALID ADDRESS)
 (ADDRESS UPDATE) 57 W SOUTH TEMPLE STE 410 ELY, NV 89301
SALT LAKE CITY UT 84101-1504 LARRY A NEWMAN
 phone (801) 355-7260 phone () NO LISTING
 account no. N 9750 account no. N P0633

Well(s) (attach additional page if needed):

Name: <u>NEEDLE STATE #1/TA</u>	API: <u>43-027-30009</u>	Entity: <u>11593</u>	Sec <u>16</u> Twp <u>24S</u> Rng <u>19W</u>	Lease Type: <u>ML29648</u>
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- N/A 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). ** Unable to locate.*
- N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). ** See lease Assignment & St. Land doc.*
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: ____ *(see phone doc.)*
- N/A 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- See 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(1-6-94)*
- See 6. Cardex file has been updated for each well listed above.
- See 7. Well file labels have been updated for each well listed above.
- See 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. *(1-6-94)*
- See 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes* 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) (If entity assignments were changed, attach copies of Form 6, Entity Action Form). *99998 to 11593*
- Yes* 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only) ** See phone doc.*

- N/A* *Yes* 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- 2. A copy of this form has been placed in the new and former operators' bond files.
- 3. The former operator has requested a release of liability from their bond (yes/no) . Today's date 19 . If yes, division response was made by letter dated 19 .

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A* *Yes* 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated 19 , of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested. *DCO 1-10/94*
- N/A* 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- ✓* 1. All attachments to this form have been microfilmed. Date: January 27 1994.

FILING

- Yes* 1. Copies of all attachments to this form have been filed in each well file.
- Yes* 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

940106 Operator change per Admin. (OTS & FRM)



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

May 5, 1994

Jack Losse
Federal Resources Corporation
P.O. Box 806
Salt Lake City, Utah 84001

Dear Mr. Losse:

Per our conversation of May 3, 1994, enclosed is the well plugging and abandonment procedures information you requested for the Needle Anticline State 1-B and the Needle State #1 wells.

If you have any further questions or concerns please contact me at (801)538-5340.

Yours truly,

A handwritten signature in cursive script that reads "F. R. Matthews".

F. R. Matthews
Petroleum Engineer

ldc

Enclosures

cc: R.J. Firth, Associate Director
Ed Bonner, State Lands and Forestry
Well file

WOI54



PLUG AND ABANDONMENT PROCEDURE

Needle State # 1
Section 16, T24S, R19W
Millard County, Utah

Well Data:

Location: 1980' FNL 1980' FWL
Total Depth: 350'
Casing: 7"

Procedure:

The Division shall be notified 24 hours prior to the start of plugging operations.

1. MIRU well service unit.
2. Clean out well bore to 350'.
3. Fill well bore with 7 sx mortar mix NO GRAVEL, approximately 3 yards of cement.
4. Cut off casing 2' below ground level, install dry hole marker with legal identification.
5. Level disturbed area around dry marker.

Cheapest -

PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File NEEDLE ANTICLINE 1-B
NEEDLE STATE #1
 (Location) Sec 16 Twp 24S Rng 19W
 (API No.) 43-027-30011/43-027-30009

Suspense
 (Return Date) _____
 (To - Initials) _____

Other
OPERATOR FILE
VLC - FYI
FRM - FYI
RJF - FYI

1. Date of Phone Call: 9-5-95 Time: 3:00

2. DOGM Employee (name) L. CORDOVA (Initiated Call)
 Talked to:

Name ED BONNER (Initiated Call - Phone No. (801) 538-5508
 of (Company/Organization) TRUST LANDS ADMIN.

3. Topic of Conversation: COMMODORE RESOURCES CORP. (2 WELLS LISTED ABOVE)
(ML-29648)

4. Highlights of Conversation: _____
ED ASKED THAT THE DIVISION STOP MAILING THE MONTHLY OIL AND GAS PROD. REPORT
TO COMMODORE RES. FOR THE WELLS LISTED ABOVE. TRUST LANDS IS IN THE PROCESS
OF GETTING THE WELLS PLUGGED AND ABANDONED. THEY HAVE PULLED THE BOND THAT
WAS IN PLACE AND ARE AWAITING A PLUGGING PLAN FROM FRANK MATTHEWS OF THE DIV.
FINAL ABANDONMENT IS EXPECTED SOON.

DELETED MAILING ADDRESS: COMMODORE RESOURCES CORP.
C/O FEDERAL RESOURCES
BOX 806 (JLOSSE)
SALT LAKE CITY UT 84110
(801)355-7260

*UPDATED INDIVIDUAL WELL DATA ON SYSTEM.

PROJECT WORK ORDER #2000-02
ATTACHMENT B - WELL PLUGGING AND RECLAMATION PROCEDURES

03/23/00

Needle Wells Millard County – 2 on 1 Location

Note: All cement volumes use 100% excess outside pipe and in open hole and 50' excess inside pipe.

Needle State #1, API# 43-027-30009

SE/4, NW/4, (1980' FNL and 1980' FEL), Section 16, T-24-S, R-19-W, SLM
Wildcat Well (drilled 1974)

1. Comply with all DOGM and Utah State OSHA safety regulations. Conduct safety meeting for all personnel on location daily.
2. Using pole and pulley system, winch or other suitable means, remove electric submersible pump along with ancillary tubing, rope and power cable from well (est. length of 250')
3. RIH with coiled-tubing rig ("CTR") tubing to bottom of hole estimated at 350'. Mix approximately 10 bbl of viscous bentonite mud (approx. 25 #/bbl Wyoming bentonite, 8.69 #/gal) with cedar fiber LCM and spot as balanced mud plug from 350' to 100'. Allow time for mud to set up. Circulate hole at 100 feet. Go to Step 6.
4. **Plug #1 (Surface Plug, 100' to ground level):** Mix approximately 20 sxs Class B cement and spot balanced plug from 100' to surface with CTR tubing. WOC.
5. Cut off 7 " casing at surface and top off with cement as necessary.
6. Install standard State P&A marker. RD, Move to Needle State #1-B.

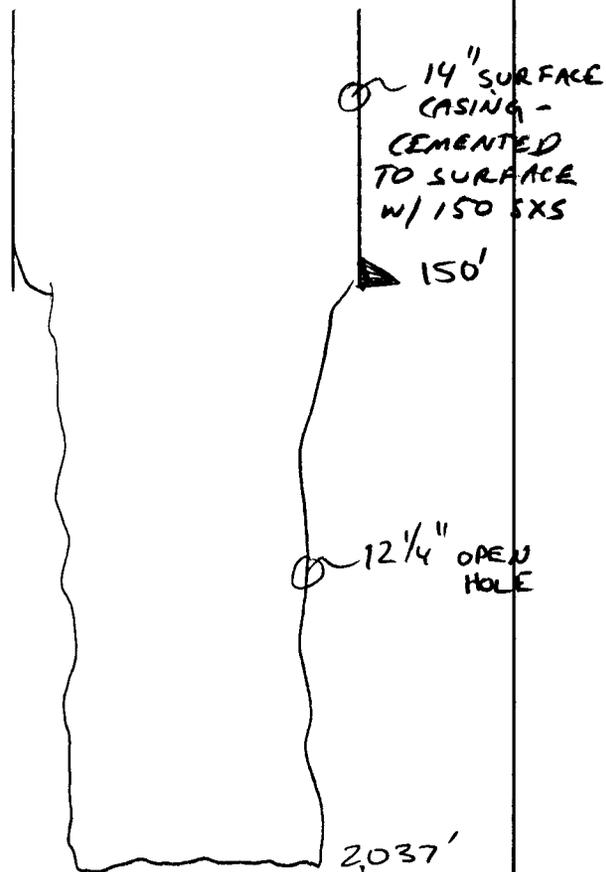
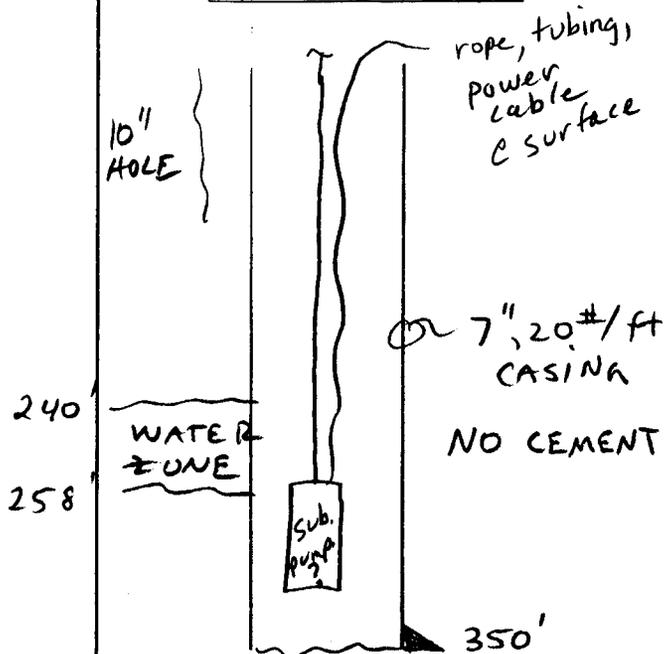
Needle State #1-B, API# 43-027-30011

SE/4, NW/4, (1980' FNL and 2030' FWL), Section 16, T-24-S, R-19-W, SLM
Wildcat Well (drilled 1974)

1. Comply with all DOGM and Utah State OSHA safety regulations. Conduct safety meeting for all personnel on location daily.
2. Excavate around surface casing as required.
3. RIH w/CTR tubing to maximum depth. Load hole from maximum depth to 100' with mud as described above. Allow time for mud to set up. Circulate hole at 100 feet.
4. **Plug #1 (Surface Plug, 100' to ground level):** Mix approximately 100 sxs Class B cement and spot balanced plug from 100' to surface with CTR tubing. WOC.
5. Top off 7 " casing at surface with cement as necessary, install standard State P&A marker, backfill as required.
6. Clean location and level pit and seed pit area.

NEEDLE ST #1

NEEDLE ST 1-B



UCS Item	Description	Type	Units	Quantity	Unit Cost	Subtotal
A	WORKOVER RIG LABOR AND EQUIPMENT					
A1	4-man crew travel, RT to/from loc., inc. vehicle & wages	---	\$/day	2	\$220	\$440
A2	Ops. Super./Cementer inc. trans., pager, & cellular	---	\$/hr	20	\$55	\$1,100
A3	Double-Triple Rig w/BOPE, rams, strip and swab tools	---	\$/hr	0	\$200	\$0
A4	Drilling package w/PS, mud pit and triplex pump	---	\$/hr	0	\$50	\$0
A5	Water storage and flow tanks	---	\$/day	2	\$80	\$160
A6	Tubing work string rental	---	\$/day/ft	0	\$0.20	\$0
A7	Standby time - crew and support equipment	---	\$/hr	0	\$120	\$0
A8	Coiled Tubing Rig	---	\$/hr	20	\$50	\$1,000
B	CEMENTING SERVICES					
B1	Balanced plug inc. fluids and testing	---	\$/plug	2	\$550	\$1,100
B2	Surface plug inc. fluids and testing	---	\$/plug	2	\$520	\$1,040
B3	Pump charge - plug not set	---	\$/hr	0	\$400	\$0
B4	API Class B or H cement - FOB location	---	\$/sk	120	\$14	\$1,680
B5	API Class B or H cement w/ 2% CaCl - FOB location	---	\$/sk	0	\$14.50	\$0
B6.1	Cement Retainer - 4.5 ", Type 1 or 2	N/A	\$/ea	0	\$850	\$0
B6.2	Cement Retainer - 5.5 ", Type 1 or 2	1	\$/ea	0	\$870	\$0
B6.3	Cement Retainer - 6.625 ", Type 1 or 2	N/A	\$/ea	0	\$1,160	\$0
B6.4	Cement Retainer - 7 ", Type 1 or 2	N/A	\$/ea	0	\$1,160	\$0
B6.5	Cement Retainer - 7.625 ", Type 1 or 2	N/A	\$/ea	0	\$1,350	\$0
B6.6	Cement Retainer - 8.625 ", Type 1 or 2	N/A	\$/ea	0	\$1,700	\$0
B6.7	Cement Retainer - 9.625 ", Type 1 or 2	N/A	\$/ea	0	\$2,000	\$0
B6.8	Cement Retainer - 10.75 ", Type 1 or 2	N/A	\$/ea	0	\$2,300	\$0
C	WIRELINE SERVICES					
C1	Travel to/from loc., inc. vehicle and wages	---	\$/mi	0	\$3.50	\$0
C2	Annular squeeze perfs - HCS 3 1/8" or 4 ", 3 holes	---	\$/event	0	\$520	\$0
C3	Annular squeeze perfs - Bi-Wire, 2 or 4 holes	---	\$/event	0	\$500	\$0
C4	Jet-cut casing, Type 1 or 2	N/A	\$/event	0	\$700	\$0
C5	Jet cut casing shot - Petrogel	---	\$/event	0	\$800	\$0
C6	Free point determination	---	\$/event	0	\$900	\$0
C7	Mast truck w/ driver	---	\$/hr	0	\$58	\$0
C8	Depth charge for gage rings, junk basket	---	\$/ft	0	\$0.16	\$0
C9.1	Cement Retainer 4.5 ", Type 1 or 2	N/A	\$/ea	0	\$650	\$0
C9.2	Cement Retainer 5.5 ", Type 1 or 2	N/A	\$/ea	0	\$650	\$0
C9.3	Cement Retainer 6.625 ", Type 1 or 2	N/A	\$/ea	0	\$1,160	\$0
C9.4	Cement Retainer 7 ", Type 1 or 2	N/A	\$/ea	0	\$950	\$0
C9.5	Cement Retainer 7.625 ", Type 1 or 2	N/A	\$/ea	0	\$1,050	\$0
D	TRANSPORTATION AND MISC. SERVICES					
D1	Winch truck w/ driver, inc. wages and mileage	---	\$/hr	0	\$78	\$0
D2	Water truck w/ driver, inc. wages and mileage	---	\$/hr	16	\$65	\$1,040
D3	2-axle rig-up truck w/ driver & helper, wages and mileage	---	\$/hr	0	\$110	\$0
D4	1-axle truck w/ driver, inc. wages and mileage	---	\$/hr	24	\$60	\$1,440
D5	Vacuum truck w/ driver, inc. wages and mileage	---	\$/hr	0	\$60	\$0
D6	Hot oiler, inc. eqpt., labor and mileage	---	\$/hr	0	\$100	\$0
D7	Welder, inc. eqpt., labor and mileage	---	\$/hr	4	\$50	\$200
D8	P&A Marker per Utah specs.	---	\$/ea	1	\$150	\$150
D9	Mud with cedar fiber LCM (25#/bbl WY Bent., 8.69 #/gal)	---	\$/bbl	110	\$4.00	\$440
D10	Per Diem inc. room and board	---	\$/man/day	15	\$60	\$900
E	THIRD PARTY CHARGES					
E1	Costs plus 15 %	---	\$	1.15	12000	\$13,800.00
					TOTAL	\$24,490.00

NOTES: E1 = Local water truck, local backhoe and scraper, and seed.
Item A-8 new item, Item D9 revised.

Needle State #1, API 43-027-30009 and Needle State #1-B, 43-027-30011

PLUG AND ABANDONMENT PROCEDURE

Needle State # 1
Section 16, T24S, R19W
Millard County, Utah

Well Data:

Location: 1980' FNL 1980' FWL
Total Depth: 350'
Casing: 7"

Procedure:

The Division shall be notified 24 hours prior to the start of plugging operations.

1. MIRU well service unit.
2. Clean out well bore to 350'.
3. Fill well bore with 7 sx mortar mix NO GRAVEL, approximately 3 yards of cement.
4. Cut off casing 2' below ground level, install dry hole marker with legal identification.
5. Level disturbed area around dry marker.

BERM →

PIT (OPEN)

MOUSE HOLE

NEEDLE ANTICLINE I-E
55 GAL DRUM OVER 1 3/8 CASING.

CELLAR BOARDS ON THIS SIDE

WATER SUPPLY WELL



NEEDLE STATE #1

DRY HOLE MARKER

FEDERAL ANTICLINE #1 F.

Lease: NEEDLE STATE
Well #: 1

Spud Date: 06/26/1974
KB: 0
TD: 376

Comp Date: 07/15/1974
ELEV: 5268
PBD: 0

API #: 43-027-30009-
Location: Sec 16 Twn 24S Rng 19W
County: MILLARD
State: UTAH
Field: WILDCAT
Operator: COMMODORE RESOURCES CORP.

	Start End	Size Length	Description
0-			
40-			
80-			
120-			
160-			
200-			
240-			
280-			
320-			
360-			
	1	0.0 350.0	7.000 Casing: 20# SURFACE NO CEMENT ! 350.0
	2	0.0 376.0	10.000 Hole: SURFACE 376.0

*Electrical cable + rope
coming out the top
of casing see
attached slides*

OIL & GAS INFORMATION SYSTEM

FILE EDIT OIL GAS GAS PLANT UIC OIL and GAS REPORTS DB MAINTENANCE OPTIONS HELP DATA CONVERSION

Well Data

WELL SEARCH

WELL DATA

WELL HISTORY

WELL ACTIVITY

WELL NAME	NEEDLE STATE 1	API NUMBER	4302730009	LEASE TYPE	3	LEASE NUMBER	ML-29648
OPERATOR NAME	COMMODORE RESOURCES CO	OPERATOR ACCOUNT	N9750	WELL TYPE		WELL STATUS	TA
FIELD NAME	WILDCAT	FIELD NUMBER	1	ELEVATION	5268* GR	ALT ADDRESS	#
COUNTY	MILLARD	CONFIDENTIAL FLAG		Q. S. T. R. M.	SENW 16 24.0 S 19.0 W S		
SURF LOCATION	1980 FNL 1980 FWL	CONFIDENTIAL DATE				TOTAL CUMULATIVE OIL	0
COORDS SURF N	4290552.00	LA / PA DATE		MM / DD / YYYY		TOTAL CUMULATIVE GAS	0
COORDS SURF E	240852.00	DIRECTIONAL				TOTAL CUMULATIVE WATER	0
COORDS BHL N		INDIAN TRIBE		CB-METHANE FLAG		BOND NUMBER	
COORDS BHL E		MULTI-LEG COUNT		SURF OWNER TYPE		BOND TYPE	
FIELD TYPE FLAG		WILDCAT TAX FLAG		C.A. NUMBER			
COMMENTS	740714 WSW/RIG SKID TO 4302730010/1-A-930726 NOT WSW PER WATER RIGHTS:940106 OP FR NEEDLE EXPLOR 4/82(LEASE ASSIGNMENT);ENTITY ADDED:950905 PA PROCEDURES IN PROGRESS PER TRUST LANDS:						

Create New Rec

Save

Cancel

To History

To Activity



NUM

WELL SEARCH	WELL DATA	WELL HISTORY	WELL ACTIVITY
API NUMBER <input type="text" value="4302730009"/>	WCR RECD DATE <input type="text" value="11"/> <input type="text" value="27"/> <input type="text" value="1974"/>	CHOKE <input type="text"/>	<input type="button" value="Get History"/>
APD RECD <input type="text"/>	PROD ZONE WCR <input type="text"/>	TUBING PRS <input type="text"/>	<input type="button" value="Create New Rec"/>
APPROVAL DATE APD <input type="text" value="6"/> <input type="text" value="25"/> <input type="text" value="1974"/>	LOCATION TD WCR <input type="text" value="1980 FNL 1980 FWL"/>	CASING PRS <input type="text"/>	<input type="button" value="Save"/>
SUNDRY INT RECD <input type="text"/>	COMPL DATE WCR <input type="text" value="7"/> <input type="text" value="15"/> <input type="text" value="1974"/>	OIL 24HR RATE <input type="text" value="0"/>	<input type="button" value="Cancel"/>
WORK TYPE <input type="text"/>	COMPL DATE SUNDRY <input type="text"/>	GAS 24HR RATE <input type="text" value="0"/>	<input type="button" value="Next Rec"/>
AUTH CODE <input type="text"/>	DATE FIRST PROD <input type="text"/>	WATER 24HR RATE <input type="text" value="0"/>	<input type="button" value="Prev Rec"/>
WELL TYPE APD <input type="text" value="OW"/>	TOTAL DEPTH MD TVD <input type="text" value="376"/>	GAS-OIL RATIO <input type="text" value="0"/>	
LOCATION SURF APD <input type="text" value="1980 FNL 1980 FWL"/>	WELL TYPE REPORT <input type="text"/>	DIR SURVEY CORED DST <input type="text"/>	
LOCATION ZONE APD <input type="text" value="1980 FNL 1980 FWL"/>	WELL STATUS REPORT <input type="text" value="TA"/>	API GRAVITY <input type="text" value="0"/>	
DEPTH APD <input type="text" value="10000"/>	PBTD MD TVD <input type="text"/>	LEASE NUMBER TYPE <input type="text" value="ML-29648"/> <input type="text" value="3"/>	
PROD ZONE APD <input type="text" value="DVNN"/>	TEST DATE <input type="text"/>	PROD METHOD TEST <input type="text"/>	
START DATE <input type="text"/>	PERFORATIONS <input type="text"/>		
SPUD DATE DRY <input type="text" value="6"/> <input type="text" value="26"/> <input type="text" value="1974"/>	ZONE FLAG COMPLETION <input type="text"/>	COMPLETION TYPE <input type="text"/>	
SPUD DATE ROTARY <input type="text"/>	LOG TYPES <input type="text"/>		
RDCC REVIEW FLAG <input type="text"/>	DIRECTIONAL <input type="text"/>	APD EXT DATE <input type="text"/>	
RDCC REVIEW DATE <input type="text"/>	WATER PERMIT <input type="text"/>	APD CONTACT NAME <input type="text"/>	
UNIT NAME <input type="text"/>	CANCEL DATE <input type="text"/>	APD CONTACT PHONE <input type="text"/>	

43-027-30009

From: Dustin Doucet
To: Garrison, LaVonne
Date: 3/25/2008 12:11 PM
Subject: Needles Wells

CC: Russell, Earlene; Staley, Don
LaVonne,

This is just an email to let you know that I have approved a change of the two Orphaned Needles wells (NEEDLE STATE 1 - API 4302730009 and NEEDLE ANTICLINE 1-B - API 4302730011) from TA to water monitor wells under jurisdiction of Water Rights. We will be changing the status in our system from TA to PA. The Utah Geological Society will be using these wells as part of their Snake Valley water monitoring program. We do not hold any bonds on these wells, but my notes show that you may still hold \$2500 for each well. As these wells will now be under the purview of Water Rights, DOGM will not require any bonds to be held on these wells. I know the UGS has supplied info to SITLA on this proposal and Tom Faddies had responded with an O.K., but I just wanted you to know about the changes in our database and the bonding situation. Let me know if you have questions. Thanks.

Dustin

Dustin K. Doucet
Petroleum Engineer
Utah Division of Oil, Gas and Mining
Oil and Gas Program
1594 West North Temple, Suite 1210
Salt Lake City, UT 84116

Phone: (801) 538-5281
fax: (801) 359-3940
email: dustindoucet@utah.gov



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:
ML-29648

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
OIL WELL GAS WELL OTHER _____

8. WELL NAME and NUMBER:
NEEDLE STATE 1

2. NAME OF OPERATOR:
ORPHAN-NO RESPONSIBLE OPERATOR

9. API NUMBER:
4302730009

3. ADDRESS OF OPERATOR:
CITY STATE ZIP

PHONE NUMBER:

10. FIELD AND POOL, OR WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: **1980 FNL 1980 FWL**

COUNTY: **MILLARD**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SENW 16 24S 19W S**

STATE: **UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Take over well as</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<u>water monitor well</u>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The Utah Geological Survey requests to assume responsibility and liability for this well to convert it to a ground-water monitoring well as part of its West Desert Ground-Water Monitoring Project. Please see the enclosure describing our plans for this site. The Utah Geological Survey has obtained approval for this plan from the State Institutional and Trust Lands Administration, the Utah State Engineer (monitor-well permit), and the Department of Environmental Quality (ground-water discharge approval) (see enclosures).



NAME (PLEASE PRINT) Richard G. Allis TITLE Director
SIGNATURE [Signature] DATE 3/17/08

(This space for State use only)
APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 3/25/08
BY: [Signature]

(See Instructions on Reverse Side)



JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

Division of Water Rights

MICHAEL R. STYLER
Executive Director
JERRY D. OLDS
State Engineer/Division Director

UTAH GEOLOGICAL SURVEY
1594 W NORTH TEMPLE
SALT LAKE CITY UT 84114

March 13, 2008

Needle State

Dear Applicant:

RE: MONITOR WELL#: 0818002M00

Regarding your request to drill 1 MONITOR WELL(S), the anticipated drilling depths will exceed the minimum regulated and reporting depth of 30 feet, thereby requiring permission from the Division of Water Rights to proceed with this project.

The specifications outlined in your well project request dated March 13, 2008, meet the State Engineer's requirements and permission is **HEREBY GRANTED**. Therefore, this letter is your authorization to proceed with the construction of the well(s) in accordance with those specifications and with respect to the following provisions:

- 1) Small diameter casing is to be used in the construction of the well(s) and no more water is to be diverted than is necessary to determine the quality of the ground water by obtaining representative samples as required by the project.
- 2) The well(s) must be drilled by a currently licensed Utah driller and must be drilled in a manner consistent with the recommended construction standards cited in the Utah State Administrative Rules for Well Drillers.
- 3) The enclosed Driller (START) Card form must be given to the licensed driller for his submittal prior to commencing well construction. The other enclosed form is the 'Applicant Card.' It is **YOUR RESPONSIBILITY** to sign and return this Applicant Card form to our office upon well completion.
- 4) If complete information is not available in the initial application, it is the **APPLICANT'S RESPONSIBILITY** to provide, upon completion, descriptive locations of the wells referenced by course and distance from established section corners, e.g. *North 565 feet and West 1096 feet from the SE corner of Section 35, T2S, R5W, SLB&M.*
- 5) At such time as the well(s) are no longer utilized to monitor ground water and the intent of the project is terminated, the well(s) must be temporarily or permanently abandoned in a manner consistent with the Administrative Rules.

NOTE: Please be aware that your permission to proceed with the drilling under this authorization expires September 13, 2008.

Sincerely,

Ross Hansen, P.E.
Regional Engineer

APPLICANT CARD for Monitor WELL#: 0818002M00

IMPORTANT: THIS CARD MUST BE COMPLETED, SIGNED AND RETURNED BY THE WELL OWNER/APPLICANT AS SOON AS THE WELL IS DRILLED BY A LICENSED UTAH WATER WELL DRILLER.

OWNER/APPLICANT NAME: Utah Geological Survey

MAILING ADDRESS: 1594 W North Temple, Salt Lake City UT 84114.

PHONE NUMBER:

WELL LOCATION: S 1815' W 685' from N4 Cor, S16, T24S, R19W, SLB&M.

WELL UTM COORDINATES: Northing: 4290598 Easting: 240867

WELL ACTIVITY: NEW REPAIR () REPLACE () ABANDON ()
CLEAN () DEEPEN ()

WELL COMPLETION DATE:

NAME OF DRILLING COMPANY/LICENSEE:

Owner/Applicant Signature

Date

***COMPLETE, SIGN AND RETURN THIS PORTION UPON FINAL WELL COMPLETION - DO NOT GIVE THIS CARD TO LICENSED WELL DRILLER - YOU MUST RETURN IT.
STATE OF UTAH DIVISION OF WATER RIGHTS Phone No. 801-538-7416
Fax No. 801-538-7467

COMMENTS:

START/APPLICANT CARD INSTRUCTIONS: First, for each well, you must give a Driller (Start) Card to the licensed driller with whom you contract to construct the well. Second, it is your responsibility to sign and return this Applicant Card to this office immediately after completion of the well. **CAUTION:** There may be local health requirements for the actual siting of your well. Please check with the proper local authority before construction begins. See the enclosed sheet addressing construction information.

From: Tom Faddies
To: Hurlow, Hugh; Lowe, Mike; Mitchell, Tom
Date: 2/25/2008 9:36 AM
Subject: Re: SNAKE VALLEY MONITORING WELLS 2008

CC: Allis, Rick; Wilcox, Rick
have reviewed your revised list. No conflicts with SITLA minerals development. Please proceed and good luck!

>>> Hugh Hurlow 2/19/2008 2:49 PM >>>
Dear Tom et al.,

I have attached a list of proposed monitor wells on SITLA land in Snake Valley and surrounding areas for 2008. Please check this list as before and let me know if you see any problems. We hope to start at "The Cove" site in late March. This site will utilize an unplugged, 2400' deep, open oil well (Needle Anticline 1-B) as the pumping well for an aquifer test. At that site we would deepen and complete an existing well (Needle State #1) as a monitoring well and drill a new monitoring well to 2200' or so. This would require DOGM signing the well over to UGS with SITLA approval. The paperwork is in preparation but we want to run a chem sample first just in case...I have attached our work plan for that site.

I have also attached a summary table of work completed last year, all on SITLA land. The project's web page is: http://www.ugs.state.ut.us/esp/snake_valley_project/index.htm

I will present the results of the drilling at the Utah Water Users' Conference in St. George March 10 and 11, and at the Association of Engineering Geologists' meeting Thursday evening, March 13.

Thank You.

Hugh

Hugh Hurlow, Senior Geologist
Ground Water and Paleontology Program
Utah Geological Survey
1594 W. North Temple
Salt Lake City UT 84114
801-537-3385



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Utah Geological Survey

RICHARD C. ALLIS
State Geologist/Division Director

February 22, 2008

Rob Herbert
Division of Water Quality
Utah Department of Environmental Quality
288 North 1460 West
Salt Lake City UT 84116

Dear Mr. Herbert:

The Utah Geological Survey Ground Water Program is conducting a ground-water monitoring well drilling program in Utah's West Desert. The first phase of the program was completed in summer and fall 2007 and involved drilling monitoring wells at eight sites in Millard County, Utah. We are preparing for phase two of the program, which involves drilling monitoring wells on 12 sites and conducting an aquifer test on one site. The purpose of this letter and enclosures is to define how we will dispose of and/or contain the drilling fluids during construction, development, and aquifer testing of these wells to prevent impact to waters of the State of Utah and underground aquifers. We do not anticipate encountering any contaminated or poor quality ground water, nor do we plan to use any drilling additives that require off-site disposal. The enclosures further detail our program and should provide adequate information to assure the Division of de minimis impact according to the UPDES rule R317-8. If you require additional information or have any questions or comments, please contact me by telephone at 801-537-3347 or mail to the address below. Thank you.

Sincerely,

J. Lucy Jordan, P.G.
Hydrogeologist/Drilling Specialist

JLJ/jlj
Enclosures (2)



Snake Valley Ground-water Monitoring-Well Drilling Project

Disposal of drilling fluids, well water, and protection of the environment

Utah Geological Survey

February 22, 2008

Project Start date: March 10, 2008

Project End date: November 30, 2008 (estimate)

Purpose: Install 2- and 2.5-inch diameter ground-water monitoring wells into the basin-fill and carbonate-rock aquifers to monitor potential effects of local and regional ground-water pumping.

Site locations: The monitoring wells will be constructed on twelve drill sites (table 1, map) in western Utah. Sites 13 through 15 will have one to three 2-inch diameter monitoring wells completed at each site. Sites 2 through 11 and 16 through 37 will have two or three 2-inch diameter wells completed at different depths in one borehole.

The sites are all on undeveloped land having desert scrub vegetation. The sites are all relatively flat to gently sloping and drainage is good. No site is within 1000 feet of any perennial water course identifiable on a US Geological Survey 1:24,000 scale map. Drainage of drilling and well development fluids from the sites will be easily controlled by discharging via hoses to flat areas where water will be conducted as sheet flow until it infiltrates the permeable alluvial surface. The volume of water we will be discharging from the drilling sites will not be sufficient to flow to any perennial water course.

Well depths: The wells range in depth from 200 feet to 1500 feet and will penetrate two aquifers containing good-quality water. The total dissolved solids concentrations of all wells are expected to be less than 500 milligrams per liter, based on water-quality information from surrounding surface and well waters.

Drilling methods: Wells will be constructed according to Utah Division of Water Rights rules R655-4-9 and R655-4-13. The type of drilling method used will depend on the geologic conditions encountered in the hole. We anticipate using the mud rotary technique to advance the 7- to 10- inch diameter boreholes through the basin-fill material (unconsolidated to consolidated sand, gravel, silt, clay and volcanic rock). We anticipate using reverse circulation with water and polymer as the drilling fluids in consolidated rock. Water used in the drilling process will come from several local sources, all of which are drinking-quality ground water from wells.

Disposal of Wastes

During drilling: Both drilling methods use a tank, pump, and hose system to contain the drilling fluids for the duration of the drilling operation. A small amount of drilling fluids will be disposed of during drilling by land surface application with the rock chip cuttings near the drill site. Once the bore hole is drilled, water may be circulated in the borehole to thin the drilling mud before well installation. The thinned mud will be allowed to discharge onto the land surface in accordance with Utah Division of Water Rights rule R655-4-9.6. All drilling additives are NSF/ANSI Standard 60 certified and non-toxic to the environment. The drilling additives potentially used during this project include the following products manufactured by Baroid Industrial Drilling Products: Quik-Gel (finely ground bentonite added to water to create a water-based bentonite drilling mud), EZ-Mud (liquid polymer added to the drilling mud to stabilize the borehole), Quik-Trol (modified natural cellulosic polymer used to thicken the mud), and Quik-Foam (a biodegradable foaming agent to help lift cuttings). Any lost circulation material added will be non-organic as required by Utah Division of Water Rights rule R655-4-9.6.

Because of the distance of the drill sites to any water course, we do not anticipate needing to contain the muddy water; however if necessary, drainage will be controlled by either running hoses to flat areas far enough from the drainage to prevent muddy water from entering a drainage, or a small impoundment will be constructed near the drill site using bags of bentonite, hay bales, or sand bags to allow sediment to settle out before water is discharged. Under no circumstances will drilling fluid be discharged into ponds, lakes, streams, or canals.

The rock chip cuttings from the borehole will be separated from the drilling fluids at the mud tanks. At each hole, between 2 and 9 cubic yards of cuttings will be disposed of by spreading on the land surface near the drill site in accordance with Utah Division of Water Rights rule R655-4-9.6. The cuttings will be less than one-half-inch diameter pieces of gravel, sand, sedimentary rock, or volcanic rock and will not be of significantly different lithology than the surface sediments at the well site or near the well site. No adverse affects of spreading the cuttings around the drill site is anticipated. No contaminated strata or ground water will be encountered. A small amount of drilling fluid will be discarded with the cuttings.

During well development: After the monitoring wells are completed, water will be withdrawn from the well until the water contains no visible sediment. This typically takes 6 to 24 hours, depending on the amount of drilling fluid (mud) and fine sediment surrounding the perforated interval of the well. During this time, water with decreasing amounts of drilling fluid and silt will be evacuated from the well at a rate of 1 to 15 gallons per minute, typically. During the early hours of development, the water may contain significant mud and silt. Any development water appearing cloudy to the naked eye will not be allowed to flow into waters of the state. Because of the distance of the drill sites to any water course, we do not anticipate needing to contain the development water; however if necessary, drainage will be controlled by either running hoses to flat areas far enough from the drainage to prevent silty water from entering a drainage, or a small impoundment will be constructed near the drill site

using bags of bentonite, hay bales, or sand bags to allow sediment to settle out before water is discharged. We anticipate the water quality of the evacuated water to be good, and because of the small volume and limited duration, land application should be allowed under Utah Division of Water Rights rule R655-4-9.6 and Utah Division of Water Quality Rule R317-8-2.

Table 1: Year 2008 well drilling and aquifer test sites.

ID	Site name	Township, range, section, distance from section corner (ft)	General location	Land owner	UTM -NAD 83		
					Easting	Northing	Zone
2	Burbank	T23S R20W 25 N440 E500 SW	21 mi. S of Border Inn	US BLM	756468	4296602	11N
3	Northeast of Garrison	T21S R19W 32 N1350 W230 SE	10 mi. SE of Border Inn	Utah SITLA	240290	4315030	12N
8	Mormon Gap	T24S R19W 13 N1950 E1100 SW	24 mi. SE of Border Inn	US BLM	245360	4290205	12N
10	East of Cowboy Pass	T17S R16W 16 N390 W1165 S4	30 mi. NE of Border Inn	Utah SITLA	271123	4356070	12N
11	The Cove/NPA	T24S R19W 16 S1145 W900 N4	28 mi. SE of Border Inn	Utah SITLA	240802	4290803	12N
12	SE Little Valley	T19S R17W 36 nd	25 mi ENE of Border Inn	Utah SITLA	nd	nd	12N
13	Garrison Agricultural	T21S R19W 36 N200 W200 SE	N side of Garrison	Utah SITLA	237026	4314621	12N
14	Eskdale Agricultural	T20S R19W 16 S150 W150 NE	Near Eskdale	Utah SITLA	242122	4329216	12N
15	Southwest of Needle Point	T24S R20W 14 S1050 E225 NW	S of Burbank	US BLM	756538	4290922	11N
16	Southern Hamlin Valley	T32S R19W 36 nd	60 mi. WNW of Cedar City	Utah SITLA	nd	nd	12N
17	Southern Pine Valley	T30S R16W 32 nd	50 mi. NW of Cedar City	Utah SITLA	nd	nd	12N
18	Southern Wah Wah Valley	T29S R14W 02 nd	25 mi. drive from Milford	Utah SITLA	nd	nd	12N



State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Water Quality Board
Joe Piccolo, *Chair*
Paula Doughty, *Vice-Chair*
David F. Echols
Neil K. Kochenour
Darrell H. Mensel
LeLand J. Myers
Richard W. Sprott
Jay Ivan Olsen
Gregory L. Rowley
Steven P. Simpson
Daniel C. Snarr
Walter L. Baker,
Executive Secretary

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

March 18, 2008

Ms. J. Lucy Jordan, P.G.
Utah Geological Survey
1594 West North Temple, Suite 3110
P.O. Box 146100
Salt Lake City, UT 84114-6100

Dear Ms. Jordan:

Subject: Snake Valley Monitoring Well Drilling Project
Ground Water Discharge Permit-By-Rule

The Division of Water Quality (DWQ) has reviewed your February 22, 2007 letter for the Utah Geological Survey (UGS) Snake Valley Ground Water Monitoring Well Drilling Project. Below is a summary of information contained in your letter.

The UGS will be installing ground water monitoring wells at 12 sites and conducting an aquifer test on one site in Utah's West Desert. Wells will be drilled to depths from 200 to 1,500 feet and will penetrate two aquifers containing high quality water expected to be less than 500 mg/l total dissolved solids based on water quality information from surrounding wells and surface waters. Drill cuttings will be separated from drilling fluid at the mud tanks, and between two and nine cubic yards of drill cuttings with diluted drilling fluid will be spread on the land surface near each drill site in accordance with Utah Division of Water Rights (DWR) rule R655-4-9.6. No adverse effects of spreading drill cuttings are anticipated, and all drilling additives are NSF/ANSI Standard 60 certified and non-toxic to the environment. Any lost circulation material added will be non-organic as required by DWR R655-4-9.6. Well development water may contain mud and silt during early pumping, but because of the high quality ground water coupled with the small volume, land application should be allowed under DWR R655-4-9.6 and DWQ R317-8-2. Aquifer test water is expected to be good quality and will be land applied at least 200 feet from the test well, and four miles from any perennial water bodies.

Based on the summary above, this project will have a *de minimis* actual or potential effect on ground water quality and qualifies for permit-by-rule in accordance with R317-6-6.2.21 and R317-6-6.2.25 of the Administrative Rules for Ground Water Quality Protection. If you have any questions, please contact me at 801-538-6038.

Sincerely,


Rob Herbert, P.G., Manager
Ground Water Protection Section

Cc: Jerry Olds, Division of Water Rights

F:\wp\pbr Letters\UGS West Desert Project PBR#2.doc

Development Plan for “The Cove” Aquifer-Test Site - Needle Anticline 1-B, western Millard County, section 16 T. 24 S. R. 19 W. SLBM

Utah Geological Survey

Introduction

As part of the Utah Geological Survey’s Snake Valley ground-water monitoring-well project, we propose to perform an aquifer test at a site about 25 miles south-southeast of Garrison in western Millard County, on SITLA land. Our plan includes using an open, orphaned oil-test well as the pumping well, deepening an already existing water-supply well associated with the oil-test well and using it as a monitoring well, and drilling one or two new monitoring wells. According to documents on file at the Utah Division of Oil Gas and Mining (DOG M), the Needle Anticline 1-B oil-test well is about 2407 feet deep, and open to the Permian-Mississippian age Ely Limestone over a depth range of about 1800 feet. The Ely Limestone is part of the “upper carbonate aquifer” of the eastern Great Basin, one of the principal interests of the UGS monitor-well drilling program. The depth and wide diameter of the well provide an exceptional opportunity to perform aquifer tests that stress the carbonate aquifer enough to achieve sufficient drawdown in nearby observation wells to calculate the aquifer parameters (hydraulic conductivity and storativity) of the carbonate aquifer. Such data are scarce in this part of the Great Basin and are critical to improve our understanding of the hydrogeology and ground-water flow systems of the region – one of the principal goals of this project.

Basic Data

Existing Wells

See attached maps and schematic cross sections from DOGM files. Based on a search of online records at the Utah Division of Water Rights, no water rights are associated with either well.

Needle Anticline 1-B

API Number: 43-027-30011

PLS Location: S 1815 W 685 N4 16 T. 24 S. R. 19 W. SLBM

Coordinates: Easting 240802m, Northing 4290803m UTM 12N NAD83

TD 2407’; static water level 215’

14” steel surface casing to 150’; 12¼” open hole to TD

Basin-fill sediment to 470’, Ely Limestone to 2270’, Chainman Shale to 2407’ based on lithologic drilling log in DOGM files.

Needle State #1

API Number: 43-027-30009

PLS Location: S 1850 W 835 N4 16 T. 24 S. R. 19 W. SLBM

Coordinates: Easting 240756m, Northing 4290791m UTM 12N NAD83

TD 350’ entirely in basin-fill sediment

7” steel casing to 350’

Development and Testing Plan

Procedures

1. Perform initial caliper and geophysical logs of Needle Anticline 1-B.
2. Grade and smooth surface surrounding Needle Anticline 1-B for safe access to well; install gravel or cement pad as necessary.
3. Remove existing pump from Needle State #1, air-develop, then perform single-well test discharging 25 to 250 gpm for 24 hours, using either existing pump or a rental pump. Water will be monitored and discharged as described in the "Discharge" section below.
4. In Needle Anticline 1-B, add additional cement to outside of 14 inch casing if necessary; ream hole from 150 to 500 feet to nominal 14 inches diameter; install and cement 12 inch steel casing within and below 14 inch casing to ~500 feet depth or 10 feet below contact between basin fill and bedrock as determined from geophysical logs. This procedure will hydrologically isolate the carbonate aquifer and allow installation of a pump below water level to perform aquifer test.
5. Run 12" bit to at least 2270 feet to ensure hole is open. Clean, flush, and circulate Needle Anticline 1-B. Run caliper and full suite of geophysical logs.
6. Install temporary pump in Needle Anticline 1-B and perform aquifer test, pump rate up to 500 gpm for 1 to 3 days, measuring drawdown in pumped well and in Needle State #1. Results will yield a preliminary transmissivity estimate for the Ely Limestone, to help design new monitor well(s). Water will be monitored and discharged as described in the "Discharge" section below.
7. Deepen Needle State #1 to about 520 feet; install piezometers (2.0" sch. 80 PVC, screen length 20') in lower part of basin fill and upper part of Ely Limestone; install appropriate seal 10 feet above and below the contact (i.e. seal will be at least 20 feet thick, centered on contact). Install locking steel cap on surface casing.
8. Using results of initial aquifer test (step 6), design, drill and construct one or two new monitor wells, 250 to 500 feet north of Needle Anticline 1-B, up to 2250 feet deep, having 1 or 2 piezometers each (2.0" PVC, screen length 20' to 40'). Install locking steel cap(s) on surface casing.
9. After water levels have stabilized, perform aquifer test: install temporary pump in Needle Anticline 1-B, pump at 500 to 1700 gpm at constant rate for up to 7 days; monitor all nearby wells. Water will be monitored and discharged as described in the "Discharge" section below.
10. Weld steel cap on top of 14 inch surface casing of Needle Anticline 1-B after all testing and monitoring is completed.

Discharge

During well rehabilitation and development, water will be discharged in accordance with methods for disposing of drilling fluids as described below.

Discharge of water is regulated by Utah Division of Quality Rule R317-8-2. During aquifer testing, water discharged by the pump will be disposed of by land application.

The pumped water will be routed at least 200 feet from the monitoring wells by a hose. Because the test site is more than 4 miles from any perennial water course, we will not be discharging to any lakes or streams. Water may reach ephemeral channels, but because the water quality will be good and suspended solids will be low, we do not anticipate needing to contain or dispose of the water in any particular way except in a manner to prevent erosion. We will prevent erosion at the discharge point using a combination of best management practices (BMPs) dictated by the volume of water being discharged, including but not limited to: 1) inducing sheet flow across heavy plastic sheeting, 2) lining a natural channel with boulders and cobbles immediately down gradient of the discharge point and creating check dams and sediment traps of straw bales, boulders, sand bags, and/or dead fall for the necessary distance from the discharge point to prevent erosion , 3) creating a temporary infiltration basin using straw bales, sand bags, and plastic sheeting to contain discharge until it can infiltrate, or other BMPs as necessary.

Time Frame

Steps 1 through 8 will occur from late March through early May 2008. Steps 9 and 10 will occur in July or August 2008.

Driller

United States Geological Survey (Steven Crawford), licence # 809. All U.S. Geological Survey drilling procedures comply with the National Environmental Policy Act.

UGS Contacts

Lucy Jordan 537-3347

Hugh Hurlow 537-3385

T.24 S., R.19 W., S.L.B.& M.

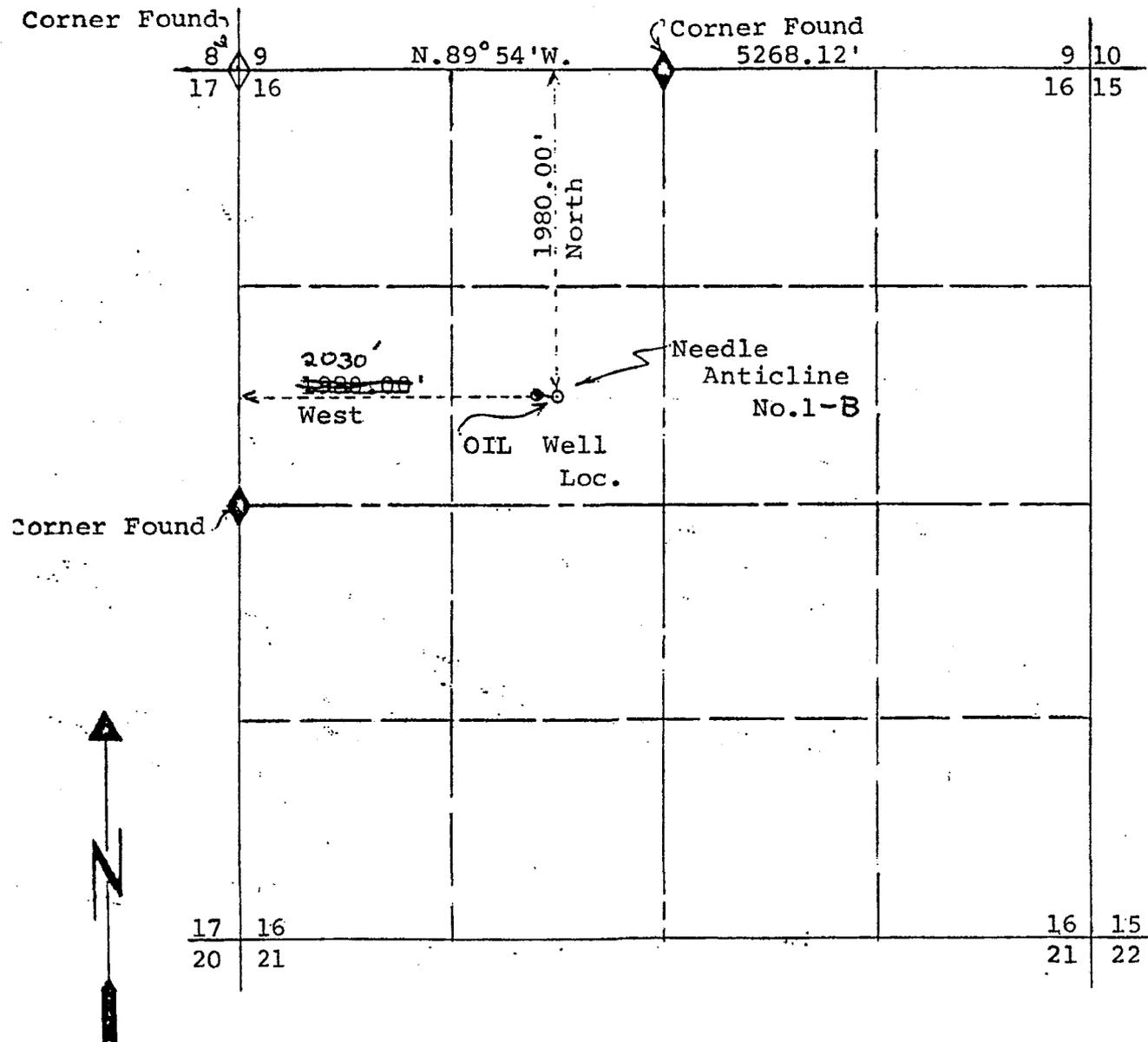
CERTIFICATION

I, Richard W. Forman, do hereby certify that this plat is a true and accurate map of the survey made under my supervision and direction between the 7th and 8th day of October, 1974.

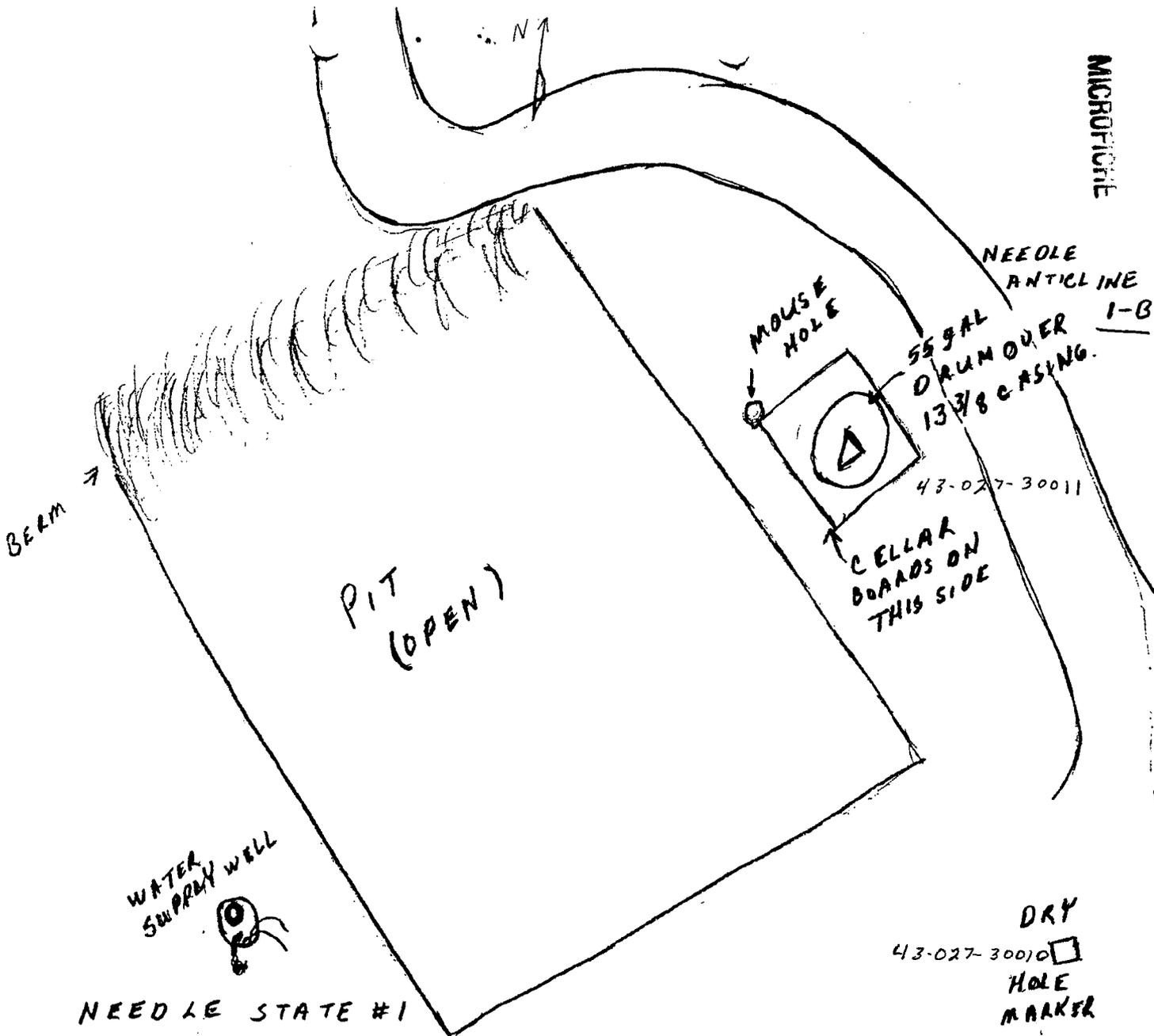
Richard W. Forman

Richard W. Forman
Licensed Land Surveyor
Nevada No.2898

Map Showing
NEEDLE EXPLORATION COMPANY
Oil Well Location
Needle Anticline No. 1
Millard County Utah
Scale 1" = 1000'



MICROFICHE



BEAM →

PIT (OPEN)

MOUSE HOLE

55 GAL DRUM OVER 1 3/8 CASING

43-027-30011

CELLAR BOARDS ON THIS SIDE

WATER SUPPLY WELL



NEEDLE STATE #1

43-027-30009

DRY

43-027-30010

HOLE MARKER

FEDERAL ANTICLINE #1A

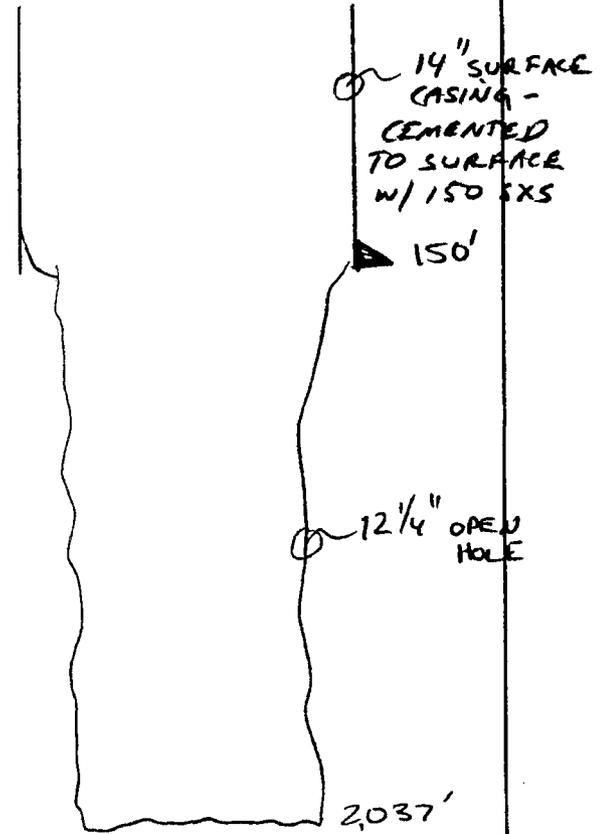
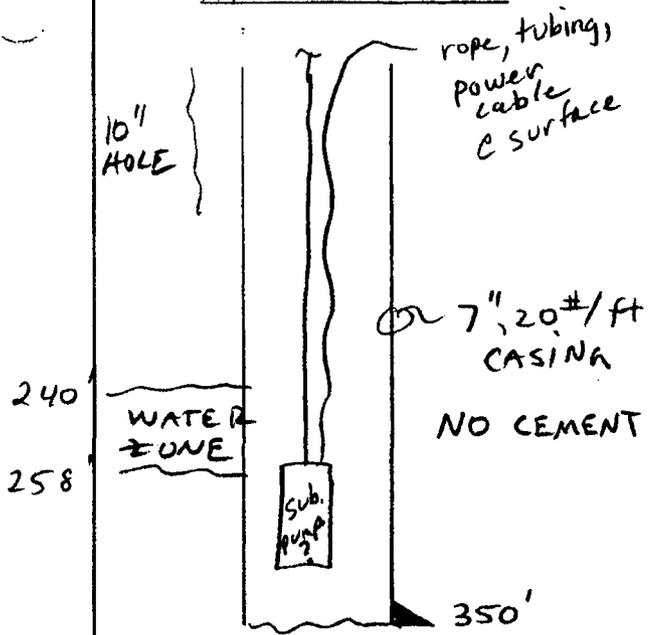
March 5, 1991

This well was originally assigned API #43-027-30008. This number belongs to the Monroe Fee #1, T. 20S R. 2W Sec. 14. The wrong API number, 43-027-30007, has been put on several sundry notices. Both of these numbers are wrong. This well is the Needle Anticline 1-A, #43-027-30010.

#43-027-30009	Needle State #1
#43-027-30010	Needle Anticline 1-A
#43-027-30011	Needle Anticline 1-B

NEEDLE ST #1

NEEDLE ST 1-B





Needle Anticline 1-B. Surface casing is not visible.



Needle State #1.

MEMORANDUM

TO: Dustin Doucet, Utah Division of Oil, Gas and Mining

FROM: Hugh Hurlow, Senior Geologist, Utah Geological Survey H.H.

DATE: March 19, 2008

RE: Sundry notices for Needle Anticline 1-B and Needle State #1 wells

Enclosed are the sundry notices for the UGS to assume responsibility of the orphaned wells Needle Anticline 1-B and Needle State 1, in SENW section 16 T. 24 S. R. 19 W., Millard County.

Also enclosed are:

- 1) Permission to proceed from Tom Faddies, State Institutional and Trust Land Administration
- 2) Monitor-well permits to modify the existing wells from the Division of Water Rights
- 3) Material submitted to the Utah Division of Water Quality for the well modification and new well drilling, and their letter of approval
- 4) Our development plan for modification of the existing wells, drilling of new monitor wells, and aquifer testing at the site.

We hope to begin work at the site next week. I apologize for the short time frame.

Thank You Dustin

