

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. Type of Work: DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. Lease Designation and Serial Number:	
B. Type of Well: OIL <input type="checkbox"/> GAS <input type="checkbox"/> OTHER: Scientific SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. If Indian, Allottee or Tribe Name:	
2. Name of Operator: DOSECC, Inc.		7. Unit Agreement Name:	
3. Address and Telephone Number: 423 Wakara Way, Suite 300, SLC, UT 84108 (801)585-9687		8. Farm or Lease Name:	
4. Location of Well (Footages) At Surface: 40° 53' 49" N 112° 14' 46" W At Proposed Producing Zone:		9. Well Number: GSL-3A	
14. Distance in miles and direction from nearest town or post office: 17 miles NW of Salt Lake International Airport		12. County: Davis	13. State: UTAH
15. Distance to nearest property or lease line (feet):	16. Number of acres in lease: N/A	17. Number of acres assigned to this well: N/A	
18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet):	19. Proposed Depth: 50 m (164')	20. Rotary or cable tools: Hydraulic Piston Core	
21. Elevations (show whether DF, RT, GR, etc.): Lake Level (approx. 4200')		22. Approximate date work will start: August 1, 2000	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
6"	6"		30'	None
4.5"	4.5"		TD	None

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

The general drilling plan is as follows:

1. Sample with HWT hydraulic piston core to a nominal depth of 10 m. The depth will be determined by the presence of a competent lithologic unit that will be capable of supporting a riser pipe.
2. Wash in riser pipe over HWT and tie back to the barge. Riser pipe has a diameter of 6 inches.
3. Sample using appropriate coring techniques to the designed depth.
4. Pull out HWT. Pull out riser.

24. Name & Signature: Dennis L. Nielson *D. Nielson* Title: Executive Director Date: 3/8/00

(This space for State use only)

API Number Assigned: 43-011-30007

Approved by the
Utah Division of
Oil, Gas and Mining

RECEIVED

Date: 5/17/00

MAR 14 2000

By: *[Signature]*

DIVISION OF
OIL, GAS AND MINING

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. Type of Work: DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. Lease Designation and Serial Number:	
B. Type of Well: OIL <input type="checkbox"/> GAS <input type="checkbox"/> OTHER: Scientific SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. If Indian, Allottee or Tribe Name:	
2. Name of Operator: DOSECC, Inc.		7. Unit Agreement Name:	
3. Address and Telephone Number: 423 Wakara Way, Suite 300, SLC, UT 84108 (801)585-9687		8. Farm or Lease Name:	
4. Location of Well (Footages) At Surface: 40° 53' 49" N 112° 14' 46" W At Proposed Producing Zone: 40.8915 112.241 -1011544.95 4527242.17 3951155.05		9. Well Number: GSL-3B	
14. Distance in miles and direction from nearest town or post office: 17 miles NW of Salt Lake International Airport		10. Field and Pool, or Wildcat:	
15. Distance to nearest property or lease line (feet):		12. County: Davis	13. State: UTAH
16. Number of acres in lease: N/A		17. Number of acres assigned to this well: N/A	
18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet):		20. Rotary or cable tools: Hydraulic Piston Core	
19. Proposed Depth: 50 m (164')		22. Approximate date work will start: August 1, 2000	
21. Elevations (show whether DF, RT, GR, etc.): Lake Level (approx. 4200')			

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
6"	6"		30'	None
4.5"	4.5"		TD	None

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

The general drilling plan is as follows:

1. Sample with HWT hydraulic piston core to a nominal depth of 10 m. The depth will be determined by the presence of a competent lithologic unit that will be capable of supporting a riser pipe.
2. Wash in riser pipe over HWT and tie back to the barge. Riser pipe has a diameter of 6 inches.
3. Sample using appropriate coring techniques to the designed depth.
4. Pull out HWT. Pull out riser.

24. Name & Signature: Dennis L. Nielson *DL Nielson* Title: Executive Director Date: 3/8/00

(This space for State use only)

Division of Oil, Gas and Mining

RECEIVED

API Number Assigned: _____
Date: 5/17/00
By: *Bredley*

Approval: _____
MAR 14 2000
DIVISION OF OIL, GAS AND MINING

Karl Kayle

DOSECC, Inc.

Drilling, Observation and Sampling of the Earth's Continental Crust

Dr. Dennis L. Nielson
Executive Director
801-585-6855
801-585-9687

423 Wakara Way, Suite 300
Salt Lake City, Utah 84108

March 8, 2000

Mr. Arthur W. DuFault
Director
Division of Forestry, Fire and State Lands
P.O. Box 146703
Salt Lake City, UT 84114-5703

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

Dear Mr. DuFault:

This letter is an application to perform drilling operations in the Great Salt Lake. The purpose for this drilling is to collect continuous core samples that will be analyzed to determine the paleo-climate history of the lake as well as to evaluate the history of fault movement along the East Great Salt Lake fault. The drilling will be funded by the U. S. National Science Foundation and the U. S. Geological Survey. The Principal Investigators of the project and their home institutions are as follows:

Dr. Kerry Kelts, University of Minnesota
Dr. Andrew Cohen, University of Arizona
Dr. David A. Dinter, University of Utah
Dr. Owen Davis, University of Arizona
Dr. Jack Oviatt, Kansas State University
Dr. Walter E. Dean, U. S. Geological Survey
Dr. Roy Johnson, University of Arizona

DOSECC, Inc will serve as the operator for this project. DOSECC is a non-profit corporation established in 1984 to aid the scientific community in the collection of subsurface samples. DOSECC has served as the operator on a number of scientific holes, most recently the Hawaii Scientific Drilling Program that was drilled on the Island of Hawaii and collected continuous core to a depth of 10,201 feet.

Drilling Equipment and Methods

The holes will be drilled using the GLAD800 drilling system. This system is being developed specifically for continuous core drilling in modern lakes through a joint venture between

DOSECC and the International Continental Drilling Program in Potsdam, Germany. The system consists of a modified Christensen LC1500 coring rig mounted on a modular barge. The system is shown schematically in Figure 1 and specifications are outlined in Table 1. Drilling methods will be determined by lithology and hole conditions and will be based on techniques used in the Ocean Drilling Program. Techniques available will be push coring, hydraulic piston coring (HPC), diamond coring, and rotary drilling. The hole will be drilled to 4.5 inch diameter (HWT size).

The general drilling plan is as follows:

1. Sample with HWT hydraulic piston core to a nominal depth of 10 m. The depth will be determined by the presence of a competent lithologic unit that will be capable of supporting a riser pipe.
2. Wash in riser pipe over HWT and tie back to the barge. Riser pipe has a diameter of 6 inches.
3. Sample using appropriate coring techniques to the designed depth.
4. Pull out HWT. Pull out riser.

Core samples will be retrieved in plastic liners in nominal 3 m lengths. These will be cut into 1.5 m lengths and capped. The samples will be transported to shore for analysis.

Circulation of drilling fluid is not required for the push coring and HPC activities. The advance of the diamond coring bit or rotary drilling assembly will require fluid circulation. During these operations, lake water without additives will be used as the drilling fluid and will be discharged through the riser at the lake bottom.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

Hole Locations and Depths

The hole locations are shown in Figure 2 and described in the following table.

Hole	Depth	Location
GSL00-1A	164 ft. (50 m)	41° 5' 38" N 112° 21' 53" W
GSL00-1B	164 ft. (50 m)	41° 5' 38" N 112° 21' 53" W
GSL00-2A	164 ft. (50 m)	41° 5' 44" N 112° 21' 41" W
GSL00-2B	164 ft. (50 m)	41° 5' 44" N 112° 21' 41" W
GSL00-3A	164 ft. (50 m)	40° 53' 49" N 112° 14' 46" W
GSL00-3B	164 ft. (50 m)	40° 53' 49" N 112° 14' 46" W
GSL00-4A	656 ft. (200 m)	41° 05' 00" N 112° 41' 43" W
GSL00-4B	2297 ft. (700 m)	41° 05' 00" N 112° 41' 43" W

GSL00-1A and B

These holes are located to sample the footwall block of the East Great Salt Lake fault. The

proposed location is shown on the seismic section of Figure 3. Holes A and B will be located less than 30 feet from one another. They are designed with different sample intervals so that no sediment will be lost between core runs. The sampling will determine the age and recurrence intervals on the East Great Salt Lake fault.

GSL00-2A and B

These holes are located near the GSL-1 holes and will be drilled on the hanging wall of the East Great Salt Lake fault. Again, the holes will be drilled close to one another in order to provide a continuous sample of the sedimentary section. The holes are also shown on the seismic section (Fig. 3).

GSL00-3A and B

These holes are located on the hanging wall of the Great Salt Lake fault and are shown in the seismic section on Fig. 4. In this area, the fault is associated with a scarp that demonstrates more than 3 meters of offset. The GSL00-3 holes are located within the 1 mile from the 4193 foot contour that is an exclusion zone for oil and gas development. However, this particular location is necessary to sample important stratigraphic units that will allow determination of the age and recurrence intervals of this part of the fault.

GSL00-4A and B

Holes GSL00-4A and B are located 6,707 feet ENE of the Amoco No. 1 State of Utah "0" that was spud on April 15, 1980. Amoco #1 reached T.D. at a depth of 2450 feet (747 m) on 22 April 1980. The Amoco reports on the drilling of this hole and subsequent analysis are attached to this letter. Amoco reports that no hydrocarbons were encountered in the drilling or subsequent tests. GSL00-4A will be drilled to a depth of 656 feet. GSL00-4B will be located within 30 feet of 4A and will be drilled to an estimated depth of 2,297 feet.

Figure 5 shows the locations of holes 4A and 4B at the intersection of Amoco seismic lines 21 and 18. Figure 6 displays the section for line 18 and Figure 7 shows line 21. Marked on both of these sections is the approximate distribution of the Bishop and Huckleberry Ridge tuffs.

Geophysical Logging

Contingent on hole conditions, we intend to run a geophysical logging program that will consist of gamma ray and temperature logs. In GSL00-4B density and (possibly) neutron logs will also be run through the drill pipe. If possible, sonic, borehole-compensated density, and resistivity logs will be run in open hole beneath the drill pipe before complete retrieval of the drill pipe and borehole collapse.

Potential Hazards and Mitigation

Blow Out

The shallow (50 m) holes for this program are all sited along seismic lines and have been located to avoid the presence of natural gas. The GSL00-4 holes will essentially twin an existing oil test that did not encounter hydrocarbons. We conclude that the potential for blow out is extremely low.

Spills

Lakes throughout the world are environmentally sensitive and the GLAD800 system is designed to minimize the potential for contamination from spilled fuel and lubricants. Solid decking with sides has been installed under fuel, motor and hydraulic tanks. All drilling operations will be performed through a moonpool where any spills will be confined by the barge. During drilling operations, the barge will be surrounded by a containment boom that will limit the dispersion of any accidental spills.

Storms

No drilling operations will be conducted during storms. We have chosen a time of year that is normally only effected by thunderstorms of relatively short duration. At the discretion of the on-board supervisor, depending on storm severity, our procedure will be as follows:

1. Drilling operations will be stopped and drill rods removed from the well, but riser left in place.
2. Riser also removed.
3. Crews evacuated to crew boat.

Plug and Abandon

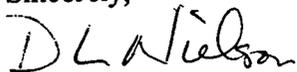
Following completion of drilling, the drill rods and riser will be removed. Due to the unconsolidated nature of the formation, it is anticipated that the hole will fill with sediments upon the retrieval of the HWT rods and riser pipe.

Sample Disposition

Core samples will be initially sent to the Utah Geological Survey Sample Library where space has been provided for an initial characterization (see attached letter from M. Lee Allison). Here the cores will be prepared for shipping to the Limnological Research Center at the University of Minnesota where the detailed analysis will be performed.

Please contact me if you require additional information concerning this application

Sincerely,

Handwritten signature of Dennis L. Nielson in cursive script.

Dennis L. Nielson
Executive Director

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

Figure 1
General Configuration of
GLAD800 Rig and Barge

Barge Length: Keel: 18.3 m (60 ft), Deck 20.4 m (67 ft)
Barge Height: 2.6 m (8.5 ft)
Barge Width: 7.3 m (24 ft)
Derrick Height: 9.8 m (32 ft)
Rig/Barge Displacement 130,000 lb.
Water in Lower Compartments 240,000 lb.

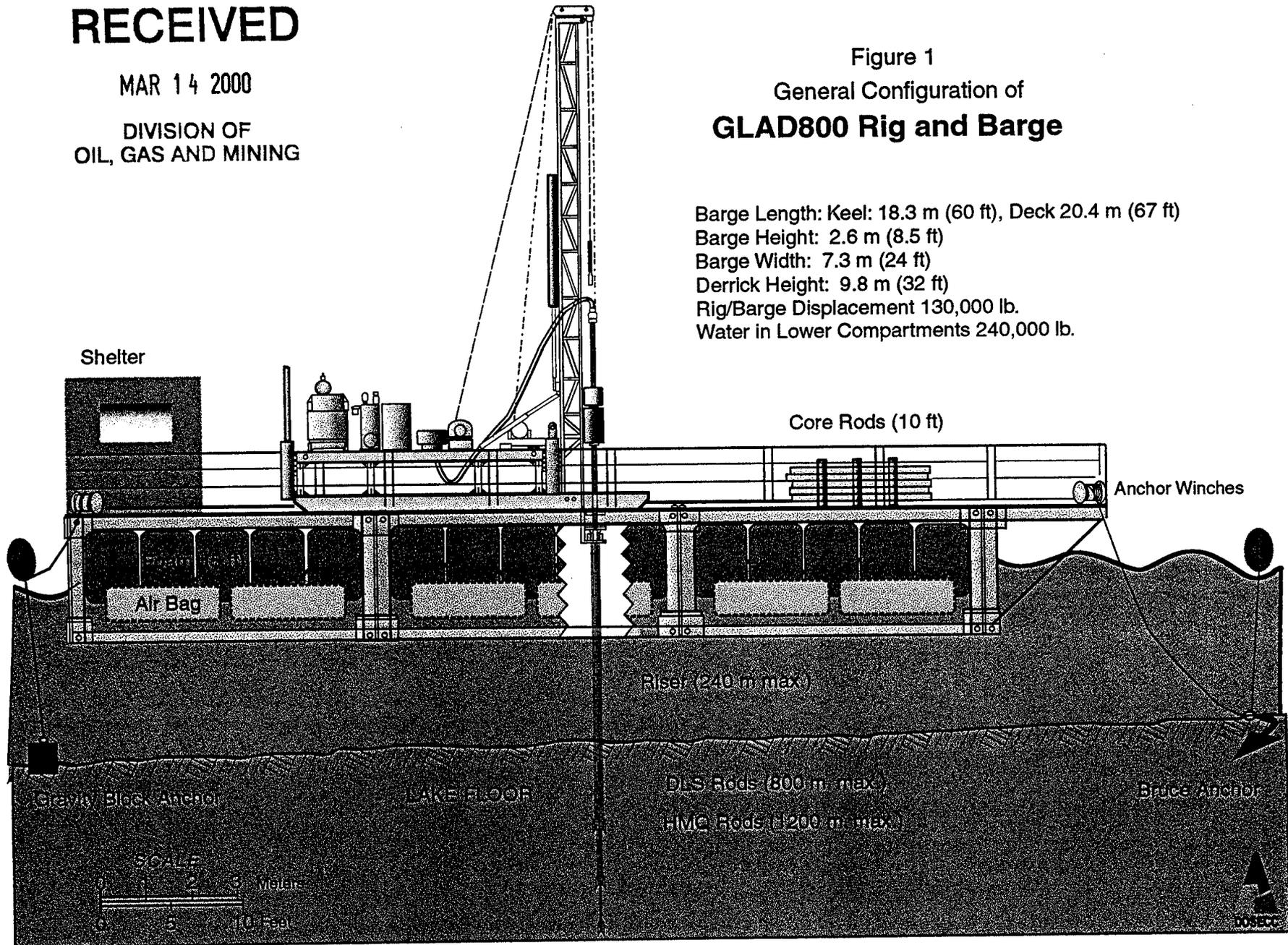


Table 1

SPECIFICATIONS FOR DRILLING RIG ON GLAD800

Depth Capacity Coring (Wireline or Conventional)

HMQ Wireline 4590 ft (1350 m)
 DLS Wireline 2830 ft (800 m)

Hoisting Capacity

Main

Capacity: Single Line-Bare Drum 17,500 lb (7955 kg)
 Double Line-Bare Drum 35,000 lb (15,900 kg)
 Line Speeds: Bare Drum 132 ft/min (40 m/min)
 Cable Size: 110 ft (33.6 m) X 5/8 in (15.9 mm)

Wireline

Capacity: Single Line-Bare Drum 2,500 lb (1,136 kg)
 Single Line-Full Drum 840 lb (382 kg)
 Line Speeds: Bare Drum 390 ft/min (119 m/min)
 Full Drum 1,260 ft/min (984 m/min)
 Cable Size: 4000 ft (975 m) X 3/8 in

Feed System

Feed Travel: 11.5 ft (3.5m)
 Feed Speeds: Fast and Slow with Variable control
 Thrust: 15,000 lb (6800 kg)
 Pull: 30,000 lb (13,600 kg)

Power Unit

Mfg: 1 - Cummins
 Power: 175 hp (196 KW)
 RPM: 1,800
 Engine Type: 6 cyl. Diesel Turbocharged/after cooled c/w clutch
 Cooling: Water

Hydraulic System

Primary Pump: 3,500 psi - 45.6 gpm (24.3 MPa - 173 lpm)
 Secondary Pump: 1,500 psi - 12.5 gpm (10.3 MPa - 47.3 lpm)
 Auxilary Pump: 3,000 psi - 13.4 gpm (20.8 MPa - 50.7 lpm)

Drillhead and Spindle Speeds

Power: Hydraulic Motor - Variable speed/reversible
 Final Drive: HV Chain drive in oil bath - 2.5 ratio
 Spindle: 4-5/8 in (117 mm)
 Spindle Speeds:

	<i>Gear</i>	<i>Ratio Speed (rpm)</i>	<i>Torque, ft lb (nm)</i>
1st	6.63:1	130-195	3,2232-2,218 (4,382-3,007)
2nd	3.17:1	270-410	1,545-1,060 (2,095-1,437)
3rd	1.72:1	500-756	839-575 (1,138-780)
4th	1.00:1	867-1,300	468-335 (662-454)

Speed Control: Manual Control from Operator's Station

Hinged Head: Swing Away

Chuck Assembly

Type: Hydraulic Open, Spring Closed
 Maximum Inside Diameter: 4-5/8 in (117 mm)
 Holding Capacity: 40,000 lb (18,181 kg)

Weight

Rig Weight: 14,000 lb (6,363 kg)
 Recommended Truck GVW: 32,000 lbs (14,545 kg)

Standard Equipment

Dump Mast
 Derrick in Two Sections
 Wireline Speed Control
 Foot Clamp 4-5/8 in (117 mm)
 Hydraulic Slide Control Panel
 Hydraulic Rod Centralizer
 Hydraulic Oil Reservoir Fill Pump and Filtration
 Additional Fuel Filter and Water Separator
 Four Hydraulic Jacks 24 in Stroke

Mud Pump Hydraulic Driven - Standard Equipment

Type: FMC L11 22D
 Max Flow: 72 gpm (272 lpm)
 Max. Pressure: 1000 psi (7 MPa)

RECEIVED

MAR 14 2000

DIVISION OF
 OIL, GAS AND MINING

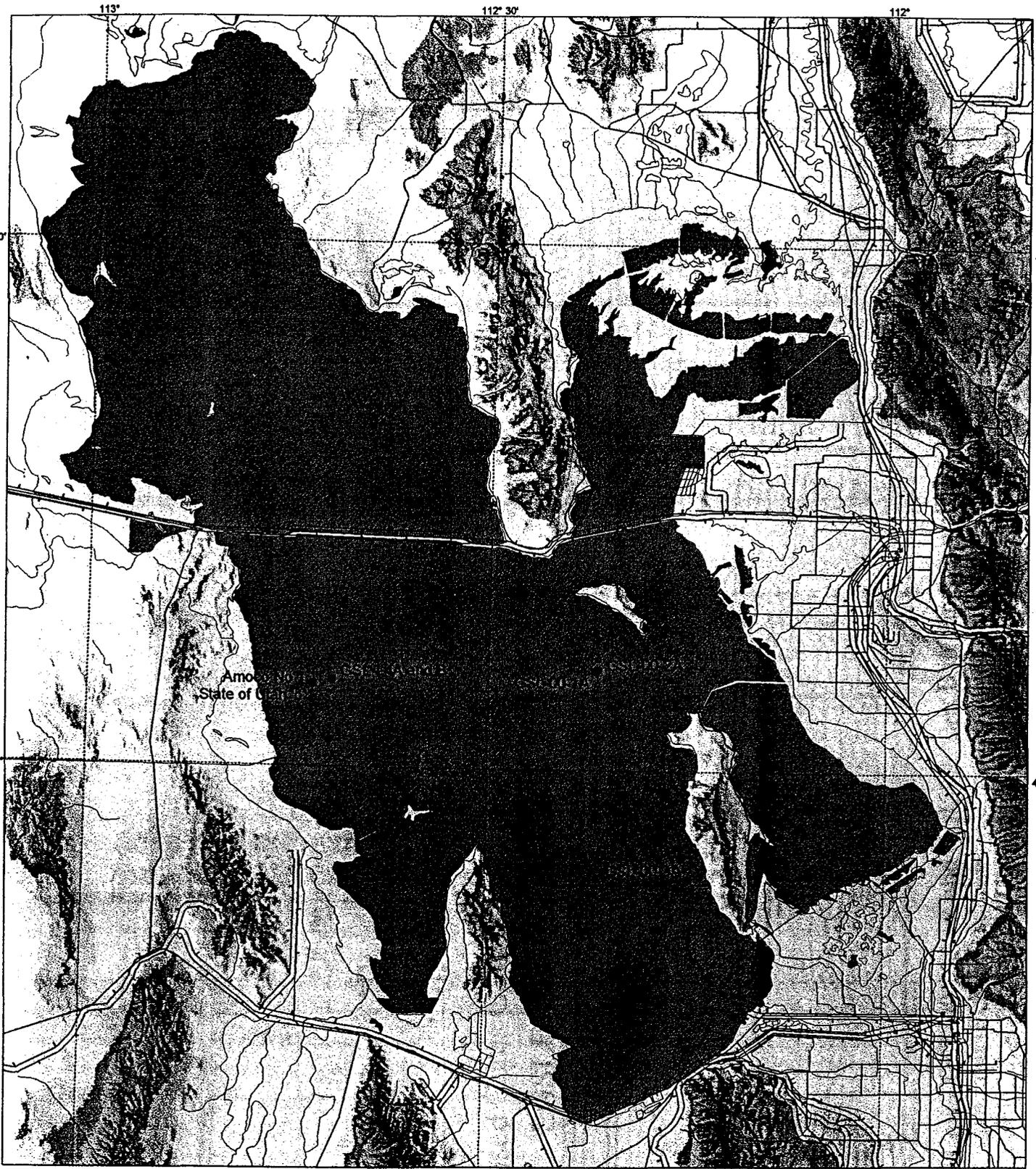
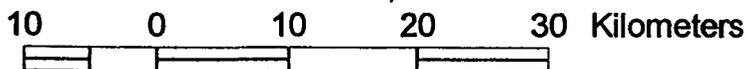


Figure 2 Location of Drill Sites.



1:575,000



RECEIVED

MAR 14 2000

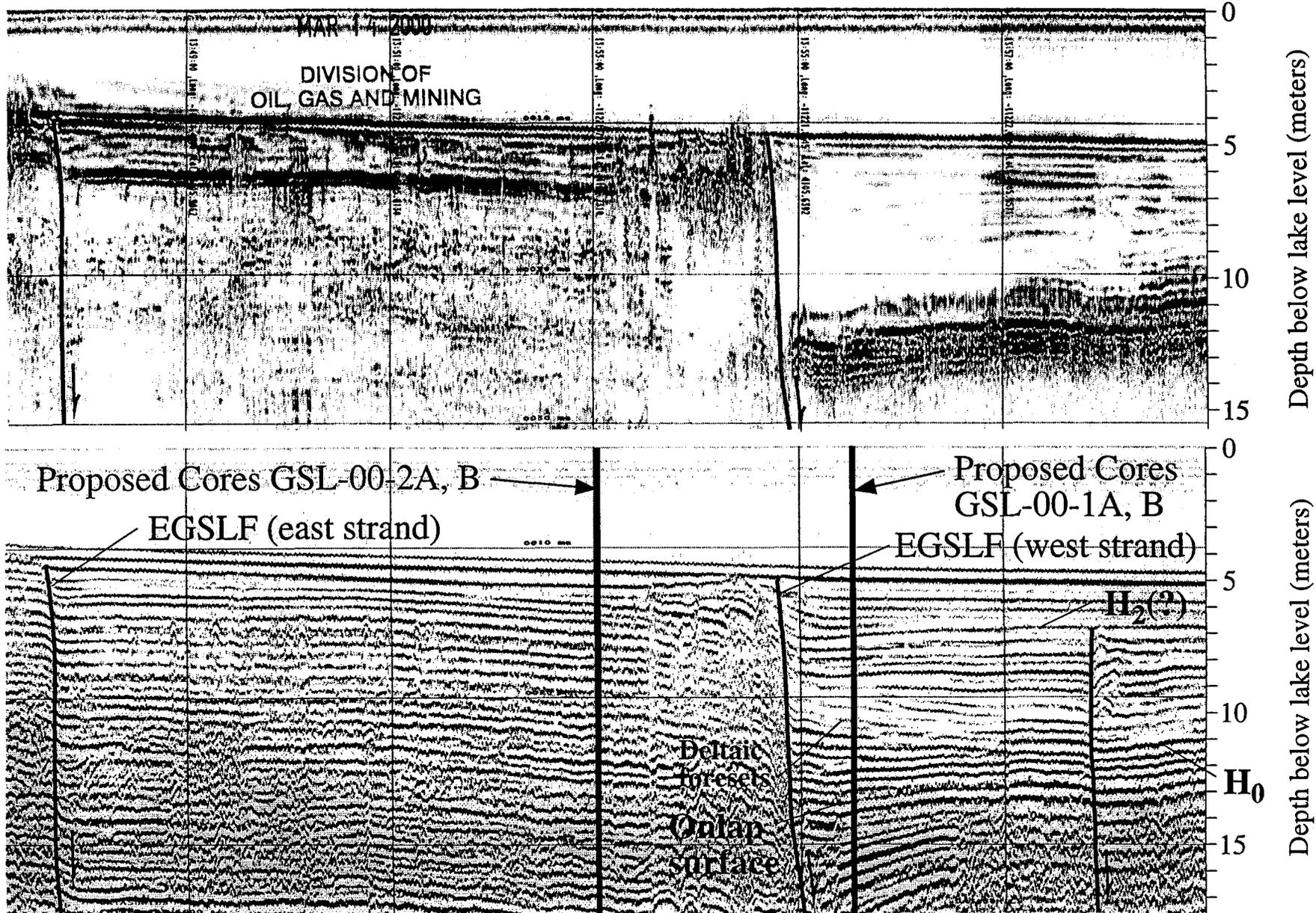
DIVISION OF
OIL, GAS AND MINING

NE

RECEIVED

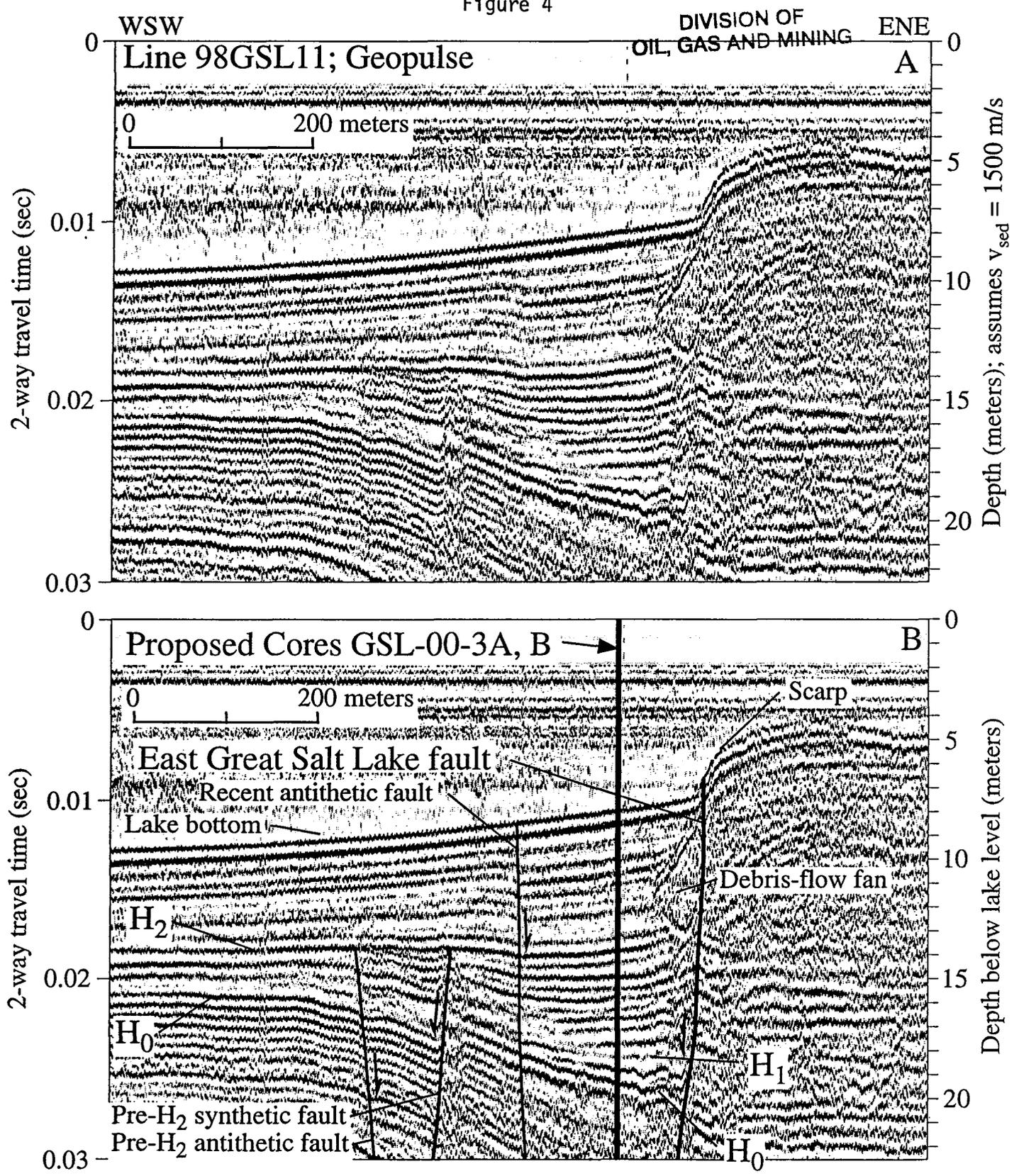
Figure 3

SW



Proposed Cores GSL-00-01A, B and GSL-00-02A, B in hanging wall and footwall, respectively, of East Great Salt Lake fault (EGSLF) southwest of Fremont Island, Line 98GSL36 (Dinter and Pechmann, 1999). A - Chirp profile. B - Interpreted Geopulse profile showing EGSLF, disconformity H_0 (top of Bonneville deposits?), pre- H_0 onlap surface, angular unconformity H_2 , and deltaic foresets.

Figure 4



Proposed Cores GSL-00-3A, B in hanging wall of East Great Salt Lake fault (EGSLF) west of Antelope Island, Geopulse Line 98GSL11 (Dinter and Pechmann, 1999). Vertical exaggeration = 27:1. A - Uninterpreted profile. B - Interpreted profile showing EGSLF and subsidiary normal faults in hanging wall, disconformity H_0 (probable top of Lake Bonneville deposits), angular unconformity H_1 (onlap surface), erosional angular unconformity H_2 , and middle Holocene debris-flow fan.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

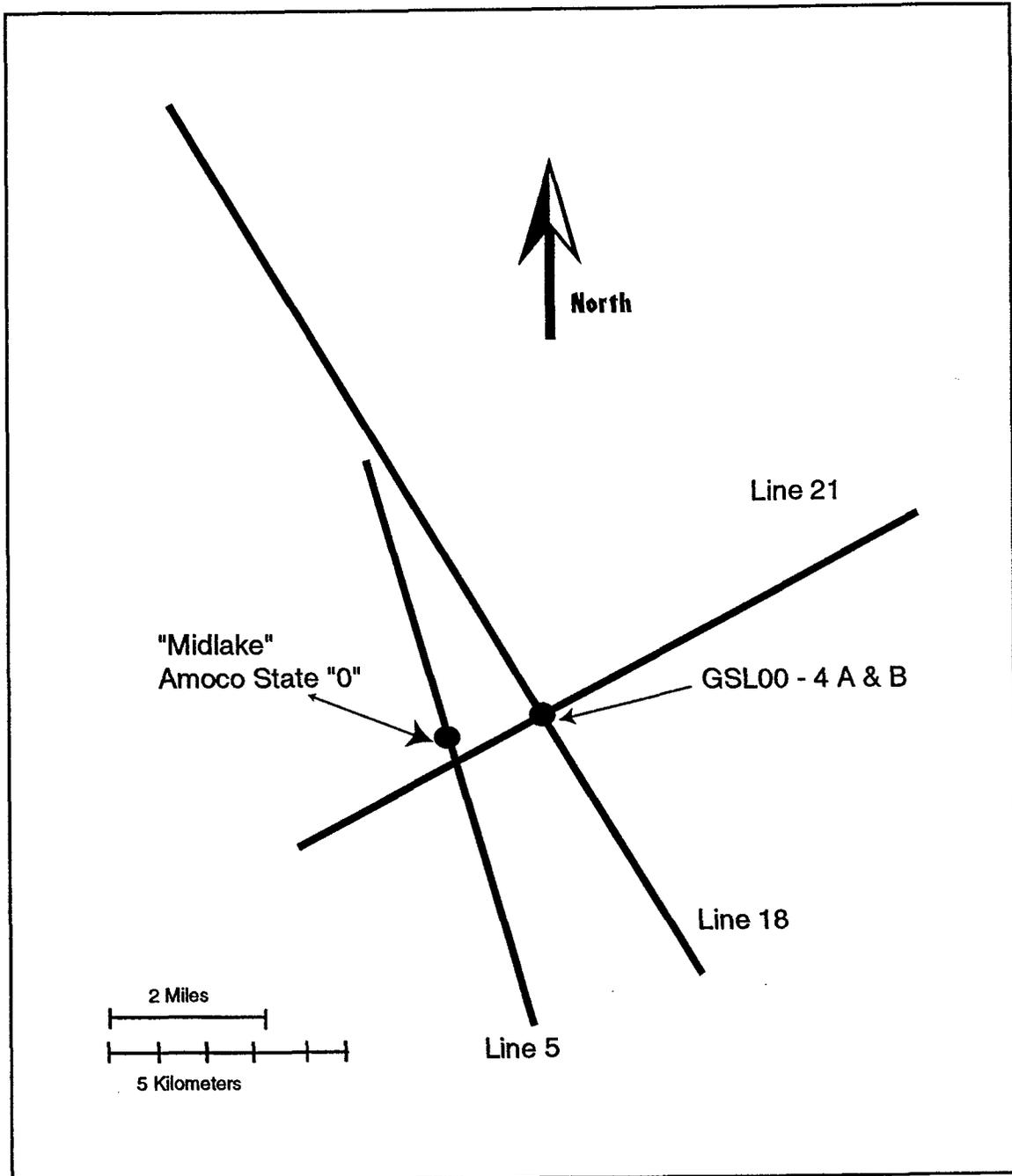
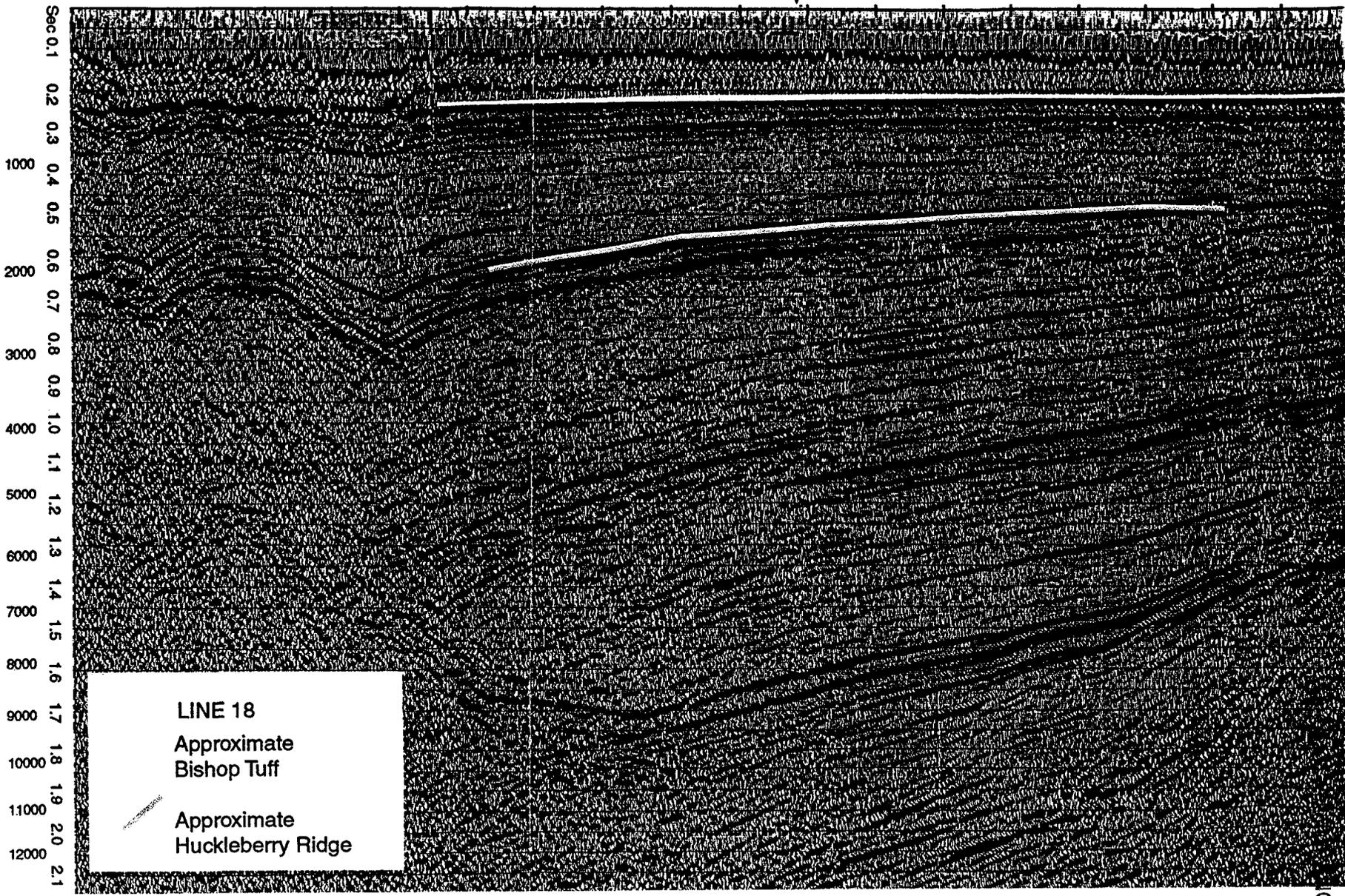


Figure 5. Location of GSL00-4A and B in relation to Amoco No. 1 State of Utah "0"

Line 21

120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290



LINE 18
Approximate
Bishop Tuff
Approximate
Huckleberry Ridge

Figure 6 Line 18 showing Bishop Tuff and Huckleberry Ridge approximate horizons.

RECEIVED
MAR 14 2000

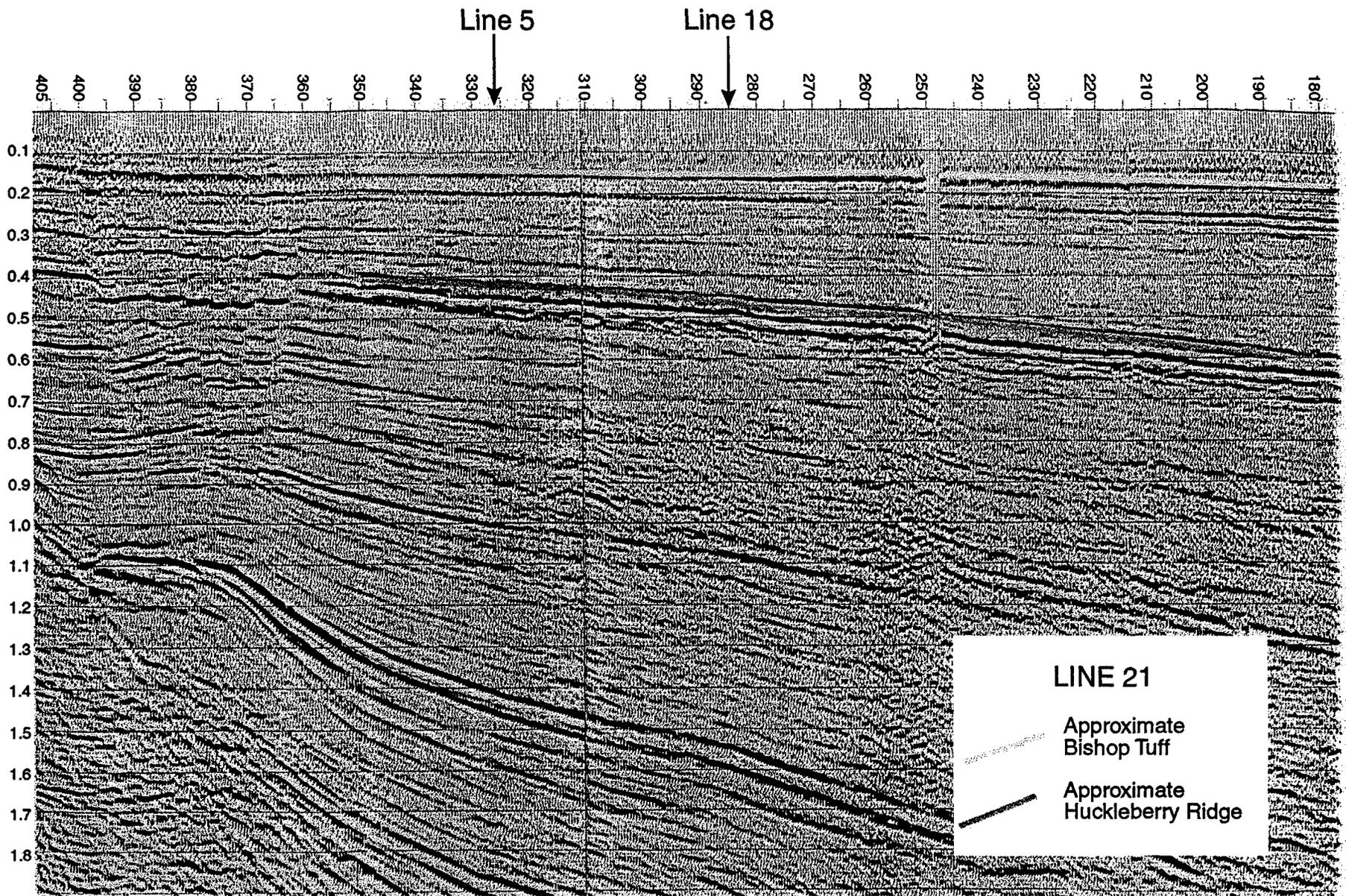


Figure 7 Line 21 showing Bishop Tuff and Huckleberry Ridge approximate horizons.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

**AMOCO Reports
and Analyses**

MIDLAKE

AMOCO PRODUCTION COMPANY
Tulsa, Oklahoma
May 27, 1980

80148ART0096

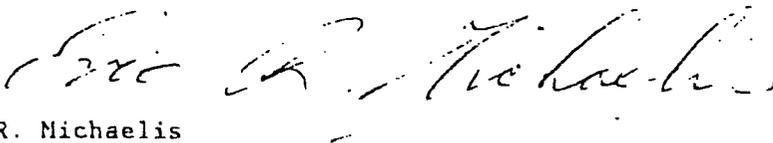
CONFIDENTIAL - TIGHT HOLE

FILE: Technical Service 5296WR

TO: M. Zimmerman, Denver Region

SUBJECT: Ben-Tol and Routine Water Analysis, Amoco No. 1 State of Utah
"O", Section 14-4N-8W, DST (1378-1420') Basalt, Box Elder Co.,
Utah (Requested by TSWO, Trushenski/Schmidt, 5-6-80)

The absence of Ben-Tol shows indicates that the formation water is not
in contact with nearby oil that contains sufficient concentrations of
benzene or toluene to contribute detectable amounts to associated water.



Eric R. Michaelis

GWS:sdg

cc: Paul Flint
J. M. Rakowski
S. P. Trushenski**RECEIVED**

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

Amoco Production Company

RESEARCH CENTER WATER ANALYSIS

T.S. or File No. 5296WR
Lab. No. W-3,717-B
Field No.
API Well No. 43-003-3001

LOCATION SAMPLED: Region Denver Division Western District Salt Lake
Operator (Plant) Amoco Well No. 1 Lease State of Utah "0"
State (Province) Utah County (Parish) Box Elder
Twp. 4N Rng. 8W Sec. 14 Quarter (Lgd.) Other (Meridian) SLBM
Sample collected from DST Date 4-22-80 Sample collected by L. Wells
Interval sampled 1378' to 1420' Interval name Basalt (tertiary basalt)
Recovery 1255' MCSW

Form 97 transmitted by S.P. Trushenski Date Authorized by

ORGANIC CONSTITUENTS in mg/l

Table with 4 columns: BOTTOM, MIDDLE, TOP, MUD. Rows: Benzene, Toluene, HC Gases. Values are mostly 0 or absent.

DESCRIPTION OF SAMPLE

Sample used for detailed analyses Bottom
Date received 5-5-80
Condition as received Good - 4/5 full
Color Yellowish
Odor Indefinite
Suspended solids Iron Oxide
Bottom sediment Iron Oxide
Oil or Fluorescence No visible oil or fluorescence

QUALITY OF SAMPLE

Table with 3 columns: BOTTOM, MIDDLE, TOP. Row: Chloride ion mg/l. Values: 79,800, 79,800, 72,000

COMMENTS:

Mudpit: 500 mg/l Cl-.
The good recovery of water, the increase in Cl- concentrations from the top to the bottom of the recovery (DM was 500 mg/l Cl-), and the chemical composition indicate that the bottom sample is formation water.

CONVENTIONAL MAJOR ION ANALYSIS

Table with 6 columns: Major ions mg/l, % of Total Major Ions, Reaction Value meq/l, % of Total Reaction Value. Rows: Sodium, Calcium, Magnesium, Potassium, Chloride, Bicarbonate, Sulfate, Carbonate, TOTAL.

Total solids by evaporation 140,080 mg
NaCl resistivity equivalent (Dunlap) 137,691 mg
Resistivity 7.4 ohm-meters at 77
pH 7.4 Specific gravity 1.096 at 72
Ryznar stability index (2pHs-pH) at

OTHER IONS AND DISSOLVED SOLIDS

Table with 6 columns: CATIONS mg/l, ANIONS mg/l, OTHERS mg. Rows: Lithium, Bromide, Iodide.

REMARKS AND CONCLUSIONS:

The absence of Ben-Tol shows and gaseous hydrocarbons in the water samples indicates that the formation water is not in contact with nearby petroleum that contains these constituents in sufficient amounts to dissolved detectable concentrations to associated water.

RECEIVED

CC:

MAR 14 2000

Analyst G.W. Schmidt

Date 5-27-80

DIVISION OF OIL, GAS AND MINING

Water Laboratory

STATE of Utah (0)

(MIDLAKE STATE UNIT
1)

Box Elder County, Utah

CNWSW Sec. 14 - T4N - R8W

API #: 43-003-30012-00

SPUD: 4-16-80

TD: REVISED 2500' (1700' THRU
BASALT) 3-27-80

RIG. PHONE: 801-534-2008

LAT: 41° 04' 43.680" N
LONG: 112° 43' 8.724" W

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

MIDLAKE (ST. OF UT 'O')

TITE HOLE - FRONTIER

- 4/14 RIG RELEASED @ 1200 ON
4/11/80 FROM 'BRIDGE' (ST.
OF UT 'L'). SPOT 400 sacks
@ 120'.
MOVED TO MIDLAKE (ST. OF
UT 'O') LOCATION. WOW.
TENSION ANCHOR LINES TODAY.
- 4/15 NO REPORT
- 4/16 TD 510'; CIRC TO CEMENT
510'/24 hrs; 93'/hr while ϕ
8.5, 45, p^H 11, WOB 9-15K,
RPM 120, PP 300.
BIT #1 17 1/2 OSC
DRIVE 20" CONDUCTOR TO 244'
below KB
CEMENT 13 3/8" CASING
CASING SHOE @ 476'
Samples:
CLYSTN, lt qy, sft, calc, sl,
SANDY. TR. qyp, bte, & fossil
hash.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

MIDLAKE (ST. OF UT. '0')

TITE HOLE - FRONTIER

4-17-80 : TD 510' ϕ cement
 8.5, 45, p⁺ 11
 BIT #2 X3A 12 1/4
 WOB 15K, rpm 35, pp 600
 Cement w/ 600 sacks class G
 TAG cement @ 380'
 FLOAT SET @ 434'
 shoe @ 476'
 96' OF cement in hole.
 Mud logger on location
 Schlumberger notified.
 Wca: 40', calm.

4-18-80 : TD 1398 wo schlumbur.
 888' / 24 hrs BIT #2 12 1/4 X3A
 Drilling RATE
 510 - 1388' 1 min/ft
 1388 - 1398 4-8 min/ft
 9.0, 35, 15.6, p⁺ 10, 5% solids
 Cl⁻ 6000 ppm, Ca⁺⁺ 40 ppm
 NO SHOW
 NO BGG
 LITH: 510-1388' Sc, lt gy-tan,
 vf-fg, prly consol, abund bent,
 bent clay, scat mica.
 1388-1398' Basalt, Dk gry
 ABUND olivine & frac Qtz.

RECEIVED

MAR 14 2000

DIVISION OF
 OIL, GAS AND MINING

MIDLAKE (ST. OF UT. CO³)TITE HOLE - FRONTIER

4/19 TD 1398 GIH TO clean
& CONDITION
RAN LOGS - DUAL IND,
BHC SONIC, CNL-FDC, &
DIPMETER.
CASING CREW ON SITE.

4/20 TD 1398. CASING & cement
ING.

4/21 TD 1398. TEST BOP'S
WILL DRILL OUT BEFORE
NOON 9⁵/₈"
SET ~~13³/₈~~ @ 1377
Wea: WIND 15-20 MPH,
1.5-2.0' waves

11:00 AM /
CORRECTION: ~~13³/₈~~ SET @ 1377
9⁵/₈"

Suppl / TD 1420' Circ. BOTS UP
2:00 PM / DRILLED 32' LITH: BASALT
RUST-GREEN, 10% clear to
milky quartz, calcite filling
NO SHOW. NO GAS. Some
frac poro. - 4.2 MIN / ft
GOING IN w/ DST TOOLS -
will open tool in AM.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

MIDLAKE (ST. OF UT. "O")

LITE HOLE - FRONTIER4/22 TO 1420' RUN DST #1
(INT. 1378-1420')Ø 22' / 24 hrs BIT # 3
8.5, 35, 18, 2% solids, 2500 ppm120 ppm Ca⁺⁺.

WOB 10-15K, RPM 70, PP 1000

LITH:

Basalt, clr, rust - blk - dk grn.

Qtz phenocrysts, milky; calc

filled fract. NO SHOW, NOODOR, NO GHS.DST #1: Report 1255' SW
from top of pipe. NO SHOW
ON TOP. Mud: 2500 ppm Cl⁻More information on next of
recovery shortly

DST #1 1378-1420 Packer @ 1363'

TIMES 15-60-60-20

1" blow to 10" blow in 9 min: 15/16 CHOKE

REC: 1255' SW: TOP, sli cloudy, SW

70,000 ppm; middle, SW, mud cut,

75,000 ppm; bottom, SW, clr-cldy,

80,000 ppm.

Sample Chamber: 2400 cc @ 80,000

ppm SW. NO SHOW; NO ODOR

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

MIDLAKE (ST. OF UT 50³)

TITE-HOLE - FRONTIER

4/22 CONT DST #1 PRESSURES

IHP	645	MUD WGT:
IHP	184-623	9#
ISI	639	BHT:
FFP	623-639	92° F
FSI	639	
FH	622	

4/23 TD 2450' Schlumb. on loc.
1030' / 24 hrs ; 34 sec / ft.
φ OUT OF BASALT @ 1445'
TOTAL 57' BASALT

B.9, 44, 15.6, p¹¹, CI-5500, Ca⁸⁰
WOB 15-30K, rpm 90, pp 1100
DEV @ 2016 - 2°

BGG - 1W NO KICKS

NO SHOWS - NO DB

LITH: Claystn, lt gray - tan
w/ MINOR SLTSTN & SS
SLI BENT, TACKY. Varying
amounts ANG fg basalt
frags. Considerable Qtz,
ANG TO SUB FND MIXED w/
clays.

Prepare to RUN logs. BHGM en
ROUTE to site. DST samples to Take
Wea: Rare, windy w 20.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

MIDCARE (ST. OF UT. 'O')

TITE - HOLE - FRONTIER

4/24 TD 2450 RUNNING TEMP LOG
ATTEMPT TO RUN BHGM
NOTIFY TO P & A.
TEMP 51° calm.

4/25 CUTTING 9⁵/₈' casing
@ cement. Prepare to
cut 13¹/₈ : 20".
Prepare to P & A. should
be off site by 4/26 AM.

4/26 - Mover to Sandbar
ST. OF UT 'N'.

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

4/16 Procedure For Midlake

Basalt TESTING:

- Drill TO TOP OF BASALT (prob. + 10-15') may be rubble zone ON TOP OF BASALT.
- Log well - set 9^{5/8}
- Drill OUT OF CEMENT plus 30' of BASALT
- Set PACKER IN PIPE & DET
- Drill REST OF BASALT

IF WATER, drill basalt and P & A.

IF NO SHOW, drill basalt and P & A.

IF SHOW, drill rest of basalt, analyze logs, pick o/w contract, decide to test and/or pump.

- No Core

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

4/20 Lewis Wells art @ Mid-lake.

4/21 Make sure that a temperature recording device is on DST and/or Logging run #2.

4/21 11:00AM - Lewis Wells called
to correct depth @ which
9 5/8" pipe (12 3/8") was set :
1377' instead of 1398'
Reduce amount of Basalt
to drill after cementing
1420' instead of 1430';
32' OF BASALT

RECEIVED

MAR 14 2000

DIVISION OF
OIL, GAS AND MINING

PRESSURE LOG

RECEIVED

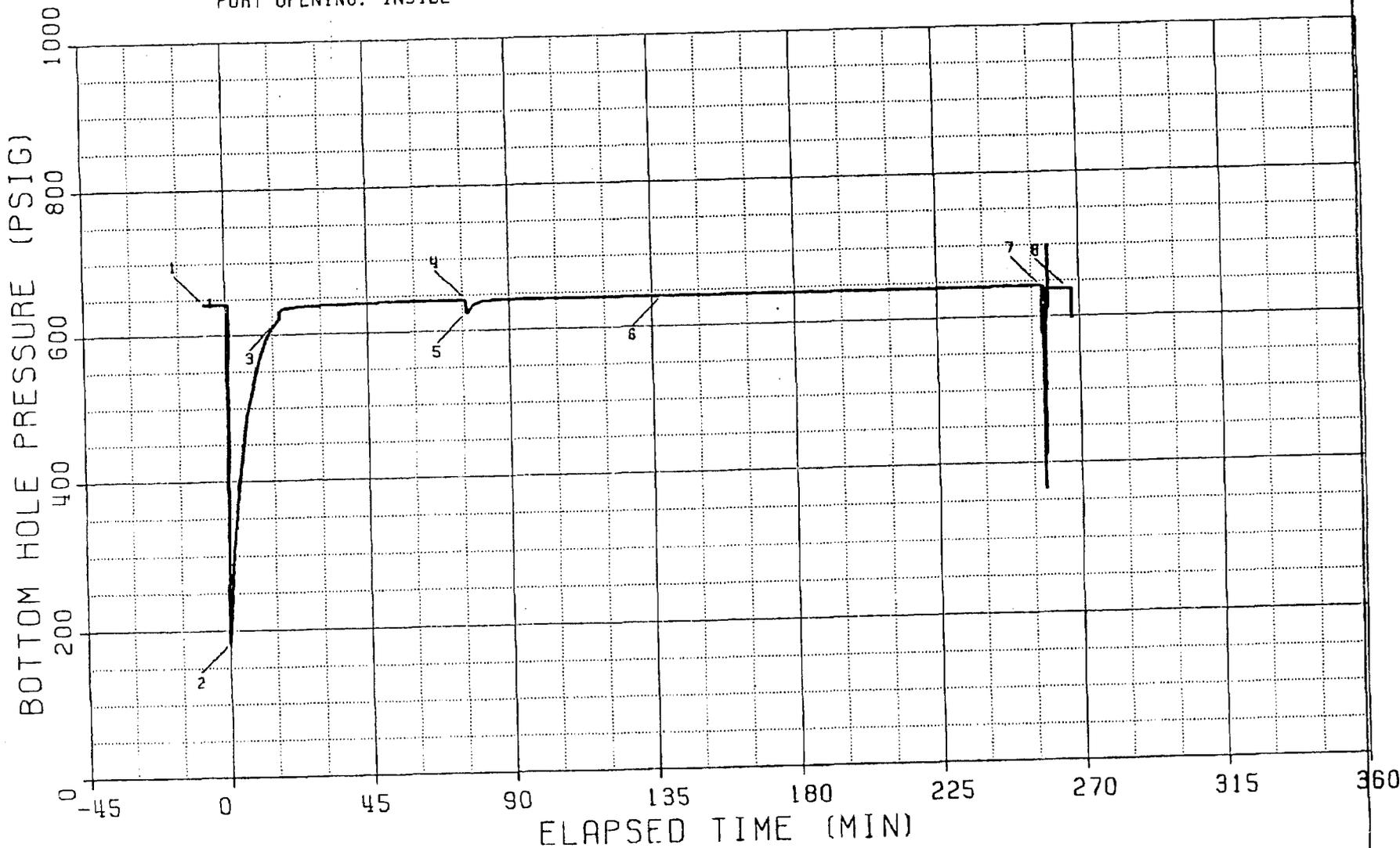
FIELD REPORT NO. 253540

MAR 14 2000

INSTRUMENT:

DIVISION OF
OIL, GAS AND MINING

NUMBER: J-1257
CAPACITY: 1600 PSI
DEPTH: 1375 FT
PORT OPENING: INSIDE





State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 UTAH GEOLOGICAL SURVEY

Michael O. Leavitt
 Governor

Kathleen Clarke
 Executive Director

M. Lee Allison
 State Geologist

1584 West North Temple, Suite 3110

PO Box 146100

Salt Lake City, Utah 84114-6100

801-537-3300

801-537-3400 (Fax)

<http://www.ugs.state.ut.us>

December 28, 1998

Dr. Dennis Nielson
 Energy & Geoscience Institute
 University of Utah
 423 Wakara Way
 Salt Lake City, Utah 84108-1210

Dear Dennis:

The Utah Geological Survey is supportive of your efforts to core both Great Salt Lake and Bear Lake with the proposed lake drilling rig. We will make our Sample Library facilities available to you and your colleagues to lay out, examine, process, and store (short or long term) any or all of the core or other samples you collect.

The UGS Sample Library moved into a new building in October, 1998. It boasts a 60% increase in storage capacity, layout and examination areas, a classroom, and sample preparation lab. We have a full time sample librarian and additional warehouse workers and geotechs to assist in core handling as needed.

We look forward to working with you on this project.

Sincerely,

M. Lee Allison
 Director

Post-it® Fax Note	7671	Date	12/28/98	# of pages	1
To	Dennis Nielson		From	Lee Allison	
Co./dept.			Co.		
Phone #			Phone #		
Fax #	585-3540		Fax #	537-3400	

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/14/2000

API NO. ASSIGNED: 43-011-30007

WELL NAME: GSL-3A & 3B (CORE TEST)
 OPERATOR: DOSECC INC (N8275)
 CONTACT: DENNIS NIELSON

PHONE NUMBER: 801-585-9687

PROPOSED LOCATION:

NESE 24 020N 040W
 SURFACE: 2083 FSL 0601 FEL
 BOTTOM: 2083 FSL 0601 FEL
 DAVIS
 WILDCAT (1)

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 3 - For records purposes only.
 LEASE NUMBER: N/A
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: LKBDS

RECEIVED AND/OR REVIEWED:

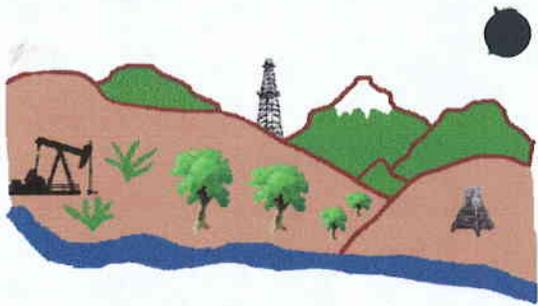
Plat **maps*
 Bond: Fed[] Ind[] Sta[] Fee[]
 (No. _____)
 Potash (Y/N)
 Oil Shale (Y/N) *190 - 5 (B)
 Water Permit
 (No. _____)
 RDCC Review (Y/N)
 (Date: 05/11/2000)
 Fee Surf Agreement (Y/N)

LOCATION AND SITING:

____ R649-2-3. Unit _____
 ____ R649-3-2. General
 Siting: _____
 ____ R649-3-3. Exception
 ____ Drilling Unit
 Board Cause No: _____
 Eff Date: _____
 Siting: _____
 ____ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: _____



Utah Oil Gas and Mining

Serving the Industry, Protecting the Environment

OPERATOR: DOSECC INC.. (N)
FIELD: WILDCAT TEST WELL (001)
SEC. 24, T 2 N, R 4 W
COUNTY: DAVIS TYPE: TEST WELL



PREPARED
DATE: 13-Mar-2000

From: Michael Hebertson
To: Brad Hill, Gil Hunt, Lisha Cordova
Date: Wed, Mar 15, 2000 12:10 PM
Subject: Core drilling in Bear Lake and Great Salt Lake

On March 14, 2000 I met with Karl Kappe of State Lands and Forestry to discuss the nature of the proposed coreing in the Great Salt Lake, and Bear Lake. He asked if we would want to permit the holes, and I indicated that our main interest would be to see that the holes were assigned an API Number, and that some record of their existence was known. I also indicated that we might be interested in the barge construction to see how pollutants might be ocnatined but that was about all.

I have since also spoken with Dennis Nielson and found that they intend to take two cores at each location, and that the holes may be offset as much as 10-15 feet. however I do not see any need to permit each individual hole and thereby have 10 permits out there. since all the drilling will be done in lake bed sediments (LKBDS) which will no doubt slough in afterwords there will be little trace if any of the activiy once it is completed. I told Dennis that our interest in the project was only for the information which people might come to us for once the information is made public.

Karl, has agreed that he will take the project to the GSL management board and file with the RDCC folks to notice the project and work through the approval process.

K. Michael Hebertson

Utah!

KARL KAPPE

Division of Forestry, Fire and State Lands
1594 West North Temple, Suite 3520
Box 145703
Salt Lake City, UT 84114-5703
801-538-5555



March 15, 2000

APINUMBER	SECTION	TOWNSHIP	RANGE	WELL_NAME	WELL_STAT	FEET_N_S	DIR_N_S	FEET_E_W	DIR_E_W	UTM_EAST	UTM_NORTH	COMPANY
TSD1711190	16.00	31.00	16.00	STRAT TEST #4	DRL	850.00	FNL	1,750.00	FEL	573,473.00	4,215,661.00	ALTEX OIL COMPANY
TSD1721190	2.00	31.00	16.00	STRAT TEST #3	DRL	750.00	FSL	660.00	FEL	575,842.00	4,217,900.00	ALTEX OIL COMPANY
	31.00	14.00 <i>H</i>	6.00 <i>F</i>	BL-1A & BL-1B	DRL	1,252.00	FNL	490.00	FEL	474,706.33	4,640,170.40	DOSECC INC.
	12.00	4.00 <i>H</i>	5.00 <i>W</i>	GSL-1A & 1B	DRL	1,140.00	FSL	2,029.00	FEL	385,873.30	4,549,388.80	DOSECC INC.
	12.00	4.00 <i>H</i>	5.00 <i>W</i>	GSL-2A & 2B	DRL	1,467.00	FSL	1,483.00	FEL	386,042.90	4,549,489.45	DOSECC INC.
	24.00	2.00 <i>N</i>	4.00 <i>W</i>	GSL-3A & 3B	DRL	2,083.00	FSL	601.00	FEL	395,455.05	4,527,242.17	DOSECC INC.
	13.00	4.00 <i>H</i>	8.00 <i>W</i>	GSL-4A & 4B	DRL	1,393.00	FNL	1,643.00	FEL	357,990.86	4,549,191.40	DOSECC INC.

From: Pam Grubaugh-Littig
To: Wright, Carolyn
Date: Friday, March 31, 2000 4:39:33 PM
Subject: Fwd: DOSECC (revised)

Carolyn, here is the application for RDCC review for drilling on the Great Salt Lake and at Bear Lake. We are requesting a 45 day comment period for this action. Dennis Nielson, DOSECC, will give a presentation at the April 11 to apprise RDCC of this requested action. DOGM is the lead agency. On the notice it states who can be called...but if you are unable to contact any of them, please call me. Thank you.

CC: Baza, John, Braxton, Lowell, Ed Storey, Hunt, G...

Mail to:
RDCC Coordinator
116 State Capitol
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801
2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)

3. APPROXIMATE DATE PROJECT WILL START:
August - September, 2000

4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Wasatch Front Regional Council AOG
Bear River AOG

5. TYPE OF ACTION: Lease Permit License Land Acquisition
 Land Sale Land Exchange Other _____

6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill

7. DESCRIPTION:
DOSECC, Inc. proposes to drill core holes in the Great Salt Lake known as **GSL-1A, GSL-1B, GSL-2A, GSL-2B, GSL-3A, GSL-3B, GSL-4A and GSL-4B** for scientific core samples. Staging for this drilling will be on Antelope Island State Park Marina. Data will be proprietary for six months, then public. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence. Division of Forestry, Fire and State Lands will issue a right of entry for this operation.

8. LAND AFFECTED (site location map required) (indicate county)
41° 5' 38" N 112° 21' 53" W, Section 12, Township 4 North, Range 5 West, Davis County, Utah
41° 5' 44" N 112° 21' 41" W, Section 12, Township 4 North, Range 5 West, Davis County, Utah
40° 53' 49" N 112° 14' 46" W, Section 24, Township 2 North, Range 4 West, Davis County, Utah
41° 05' 0.01" N 112° 41' 43.87" W, Section 13, Township 4 North, Range 8 West, Box Elder County, Utah

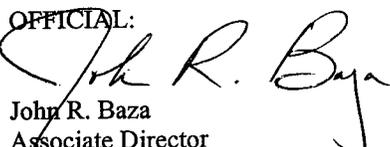
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
No

10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
Minor impact is anticipated because of the shallow drilling depths and limited time needed for drilling. Proposed depth of hole is a maximum of 50m (164'), except Box Elder which will be 200m (656') and 700m (2,297').

11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE: Mike Hebertson (DOGM) 538-5333

12. FOR FURTHER INFORMATION, CONTACT:
Gil Hunt (DOGM) 538-5297
Karl Kappe (Forestry, Fire & State Lands) 538-5495

13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:


John R. Baza
Associate Director
PHONE: 538-5334

DATE: March 31, 2000

Decision Process for Proposals on GSL

DFFSL will be the keeper of the CMP and will be the formal point of contact for proposals on sovereign land. Before making formal contact with DFFSL proponents are encouraged to contact other divisions and agencies regarding how the proposal may affect them.

A "new" proposal is a proposed land use that is either new for GSL or of such size that, in DFFSL's judgement, there is potential for significant adverse effects. DFFSL will determine if a proposal is a new proposal for which a presentation to the GSL Board of Directors (Board) is required. The Board includes DNR's division directors and executive management. For land uses that are not new proposals, DFFSL will accept an application or refer the proponent to the appropriate DNR division for routine application processing.

The Board will convene and hear presentations on new proposals by proponents. Since some detail of a proposal likely will not be available when a presentation is made, and because a proposal likely will not have undergone environmental review at the time a presentation is made, the Board will only approve or reject the proposal in concept. If a proposal is approved in concept, the proponent will be referred to the appropriate division which will process an application through standard procedures. If a proposal is rejected in concept, it is not necessarily the end of the line for a proposal. A proponent may still file an application and await final action by a division. In either case, the final action by a division is subject to appeal through administrative processes.

The Great Salt Lake Technical Team (GSLTT)

Section 65A-10-8-(11) provides that the division shall:

"Retain and encourage the continued activity of the Great Salt Lake Technical Team."

GSLTT members, because of their knowledge of the lake and their agencies' responsibilities and experience with lake problems and programs, provide valuable technical information that augment and enhance The Comprehensive Management Plan. This group is a forum for the interchange of information, studies, research, ideas and programs that affect the activities and natural systems of Great Salt Lake. Working as a team, the members review issues, examine alternatives and make recommendations through consensus. Each state division involved in the lake's management is asked to provide representation for the Technical Team. Each of the five counties involved with the lake is also asked to have a representative. Other interests and groups will serve by invitation as members to provide information.

The activities and reports of GSLTT will be presented to the Department of Natural Resources Directors (CMP Board of directors) after review and analysis by staff from Forestry, Fire and State Lands. The GSLTT will be self governing with staff support from the Department as requested and will be asked to convene for conduct of business at least two times per year.

13. UT000324-030

Trust Lands Administration/Kane, Iron
Counties: Cedar City Industrial Exchange
(Sec. 16, T39S, R9W). Comments due
4/17/00.

14. UT000403-010

*4-5-2000 Carolyn Wright - RDCC
Notified of correction.
5-15-2000 Correction's brought
up in RDCC meeting - no official
change made to agenda. Jc*

Division of Oil, Gas and Mining/Davis *& Box Elder*
County: Application for Permit to Drill -
proposal to drill core holes in the Great Salt
Lake (Sec. 12, T4N, R5W; Sec. 13, T4 N,
R8W). Comments due 5/11/00. *& Sec. 24, 21, 4W - Davis*

15. UT000403-020

Division of Oil, Gas and Mining/Rich
County: Application for Permit to Drill -
proposal to drill core holes in Bear Lake
(Sec. 31, T14N, R6E). Comments due
5/11/00.

B. Federal

16. UT000324-050

USDA/Forest Service/DOI/BLM/Sanpete
County: Manti La Sal National Forest/Price
Field Office - Flat Canyon Coal Lease Track
UTU-77114 Notice of Intent to Prepare an
Environmental Impact Statement. Federal
Register Notice dated 3/17/00, page 14523.
Comments due 4/11/00.

17. UT000327-010

DOI/BLM/Uintah County: Vernal Field
Office - Proposed Power Site Revocation
(UTU-76946). Comments due 4/20/00.

18. UT000330-020

USDA/Forest Service - Uintah National
Forest: Contamination of North Fork of
American Fork River of heavy metals being
release at mine and mill sites. Comments
due 4/23/00.

19. UT000330-030

USDA/Forest Service - Fishlake National
Forest: Integrated pest management -
noxious weeds - scoping. Comments due
4/21/00.

May 5, 2000

TO: Dave Morrow, Deputy Director

FROM: Garth Taylor, Park Manager, Antelope Island

SUBJECT: Drilling Projects

On April 10th John Sullivan and myself met with David Dinter, Marshall Pardey, and Dennis Nielson all associated with the DOSECC, Inc. project. They are planning several drilling sites in Great Salt Lake during August 2000. The meeting revolved around how Antelope Island could assist them in setting the drilling rig and transport of personnel to and from the sites during said time. A similar project was completed a couple of years ago and computerized data retrieved help detail faults in the lake. The previous project lasted two weeks. Impacts to park operation were minimal, utilizing one boat and one ranger.

As the meeting progressed park management concerns were: 1) dates of the project (specific dates in marina and on the lake); 2) times (times during the day for transport); and 3) search and rescue (for medical or inclement weather). They indicated it would take three days to fabricate barge in marina. Start on a Monday and launch before weekend. Once out on the lake the barge will be anchored in said sites for drilling. Personnel transport would entail morning and evening times, probably on 12 hour shifts. S & R for emergencies could be monitored by cell and Davis dispatch.

As this project started to come together last year, Dave Dinter made contact with the park for an idea on costs for park boat utilization. At that time I indicated state park fee schedule of \$400 per day. Again, before a meeting set in Minneapolis Dave contacted me in late March to reassure our previous \$400 price. Until the actual meeting mentioned above I was unclear of the size and scope of the project. This will be a major commitment for Antelope Island to assist this project. With the park being understaffed and time of year I mentioned DWR as a possible partner. The Great Salt Lake Ecosystem project, managed by Clay Perschon, could possibly assist with transport. It is my understanding they have contacted Clay.

I don't foresee an impact to our marina because of limited space. There is ample room

for them to setup a crane and place the barge in the marina north of the current boat ramp. Towing and setting the large barge could be another story. Depending on displacement, weight and size the park's 27' Boston Whaler could have it's hands full. Another possible alterative could be GSL's 30' boat. Transport of personnel is still the great unknown. I asked for a detailed outline of times and dates for the project. The project duration is scheduled to last the entire month of August. I have not yet received this information. I did not commit to anything because there were so many unanswered details. After I receive their proposed schedule we would again meet and further negotiate details.

I have no specific comments on drilling in GSL that would be a DFFSL issue.

CC: Jim Harland, Region Manger, Northwest Region

From: Garth Taylor
To: Dave MORROW, Jamie Dalton, Wes Johnson
Date: 5/8/00 12:12PM
Subject: Re: Drilling Projects at Bear Lake/Antelope Island

This info is in response from your previous request, my comments on the drilling project. Please see attached! And call if you need further information.

Wes, I guess you are coordinating the division response, once Eldon sends his in.....? Talk with Dave for appropriate persons to receive.

GT

>>> Dave MORROW 04/27 3:35 PM >>>
Dear Eldon, Garth,

Previously I sent you both a memo on the drilling projects in your respective marinas . I know Eldon was not able to attend the information meetings, and voice his concerns. I'm not sure if Garth was able to voice any concerns at the RDCC meeting. The 45-day comment period will end May 26.

I would like you to draft your comments and send your draft to Kathy so we can develop a coordinated division response to the Division of Oil, Gas and Mining. **Please have your comments to Kathy no later than May 19, 2000.** Please be as specific as you possibly can with alternative dates, drilling sites or other concerns you may have. If you have any questions, please call.
Thanks, Dave

CC: Clay Perschon, Karl Kappe



State of Utah

GOVERNOR'S OFFICE OF PLANNING AND BUDGET
Resource Development Coordinating Committee



Michael O. Leavitt
Governor

Brad T. Barber
State Planning Coordinator

James L. Dykmann
Committee Chairman

John A. Harja
Executive Director

116 State Capitol Building
Salt Lake City, Utah 84114
(801) 538-1027
Fax: (801) 538-1547

May 19, 2000

RECEIVED

MAY 23 2000

DIVISION OF
OIL, GAS AND MINING

Gil Hunt
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

SUBJECT: Application for Permit to Drill - proposal to drill core holes in the Great Salt Lake
State Identification Number: UT000403-010

Dear Mr. Hunt:

The Resource Development Coordinating Committee (RDCC), representing the State of Utah, has reviewed this proposal. The Division of Wildlife Resources comments:

The Great Salt Lake Management Plan and Rule R657-15 prohibit travel by boat within one mile of Hat Island. This restriction protects colonial nesting waterbirds from being disturbed there. The applicant should be advised of this restriction. There are other islands in the lake that are used for nesting by birds. These areas should also be avoided by at least one mile, even though the rule doesn't require it. Based upon the drilling locations provided, such islands might be encountered in west Carrington Bay. There are extensive shallows in this portion of the lake, and there is a possibility of running aground within one mile or more of islands.

After the drilling is completed, the opening of the drill hole should be tamped full of mud or other lake bottom materials to prevent contaminants that may be in the sediments from mixing with lake water.

The UDWR is conducting research with live birds held in pens at the Antelope Island Marina. If boats are staging from this marina, UDWR would like to meet with the applicant to ensure that our experiments aren't compromised.

When boats are traveling around the lake, they should avoid driving through large flocks of birds on the water. It is unlawful to rally or harass wildlife. Gulls, eared grebes, and phalaropes are the birds most likely to be encountered.

Provisions should be made to haul litter back to shore, as well as to ensure that there is no disposal of hardware in the lake. Provisions for fuel spills are also appropriate.

Brine shrimp harvesting season legally opens on 1 October 2000. Although UDWR has the option of delaying the opening, the drilling project should be completed prior to the opening date.

Gil Hunt

Proposal to drill core holes in the Great Salt Lake

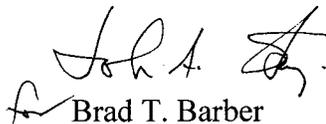
2

There is a possibility that UDWR could gain some understanding of brine shrimp and lake algae by being able to examine fresh sediments as they are removed from the lake. We would like to discuss this possibility with the applicant.

If you have any questions please call W. Clay Perschon, Great Salt Lake Project Leader, at our Salt Lake City Office (801-538-4809).

The Committee appreciates the opportunity to review this proposal. Please direct any other written questions regarding this correspondence to the Utah State Clearinghouse at the above address or call Carolyn Wright at (801) 538-1535 or John Harja at (801) 538-1559.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad T. Barber". The signature is written in a cursive style with a large initial "B" and "T".

Brad T. Barber
State Planning Coordinator

BTB/ar

PRODUCER

RED A. MORETON & CO.
 P. O. Box 58139
 Salt Lake City UT 84158-0139
 (801) 531-1234

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

- COMPANY
A Gen Star Indemnity
- COMPANY
B
- COMPANY
C
- COMPANY
D

INSURED

DOSECC, INC.
 Attn: Dennis Nielson
 423 Wakara Way #300
 Salt Lake City, UT 84108

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOT WITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY	1YG358795	6/25/99	6/25/00	GENERAL AGGREGATE \$ 2,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OP AGG \$ 1,000,000
	<input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				PERSONAL & ADV INJURY \$ 1,000,000
	OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE \$ 1,000,000
	\$7,500 Ded Per				FIRE DAMAGE (Any one fire) \$ 50,000
	Claim				MED EXP (Any one person) \$
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT \$
	<input type="checkbox"/> ANY AUTO				BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS				PROPERTY DAMAGE \$
	<input type="checkbox"/> HIRED AUTOS				
	<input type="checkbox"/> NON-OWNED AUTOS				
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT \$
	<input type="checkbox"/> ANY AUTO				OTHER THAN AUTO ONLY: \$
					EACH ACCIDENT \$
					AGGREGATE \$
	EXCESS LIABILITY				EACH OCCURRENCE \$
	<input type="checkbox"/> UMBRELLA FORM				AGGREGATE \$
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM				\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATUTORY LIMITS OTH-ER
	THE PROPRIETOR/PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL				EL EACH ACCIDENT \$
					EL DISEASE-POLICY LIMIT \$
					EL DISEASE-EA EMPLOYEE \$
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

Verification of Insurance

CERTIFICATE HOLDER

Department of Natural Resources
 1594 West North Temple #3710
 Salt Lake City, UT 84116

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

790035 JA



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

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

June 7, 2000

DOSECC, Inc.
423 Wakara Way, Suite 300
Salt Lake City, UT 84108

Re: GSL Core Hole #3A and 3B, 2083' FSL, 601' FEL, NE SE Section 24, T. 2 North,
R. 4 West, Davis County, Utah

Gentlemen:

Pursuant to the authorities of the Great Salt Lake Board of Directors, the Utah Division of Wildlife Resources, the Utah Division of Oil, Gas and Mining, the Utah Division of Parks and Recreation and the Utah Division of Forestry, Fire and State Lands, and subject to the enclosed Conditions of Approval, approval to drill the referenced test hole for geotechnical soil core sampling is granted.

This approval will expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this test hole is 43-011-30007.

Sincerely,

John F. Kimball, Jr., Director
Utah Division of Wildlife Resources

Lowell P. Braxton, Director
Utah Division of Oil, Gas & Mining

Courtland C. Nelson, Director
Utah Division of Parks & Recreation

Art DuFault, Director,
Utah Division of Forestry, Fire & State Lands

er

Enclosures

cc: Davis County Assessor

Operator: DOSECC, Inc.

Hole Name & Number: GSL #3A & 3B

API Number: 43-011-30007

Location: NE SE Sec. 24 T. 2 North R. 4 West

Conditions of Approval

1. The operator is generally required to comply with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.
2. The operator is required to notify the Oil, Gas and Mining Division of the following actions during drilling of this well:
 - 24 hours prior to cementing or testing casing
 - 24 hours prior to testing blowout prevention equipment
 - 24 hours prior to spudding the well
 - within 24 hours of any emergency changes made to the approved drilling program
 - prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Robert Krueger at (801) 538-5274 (plugging)
- Carol Daniels at (801) 538-5284 (spud)

3. All required reports, forms and submittals will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to the Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.
4. The operator shall comply with the State of Utah Antiquities Act which forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during operations, the operator is required to immediately suspend all operations and inform the Division of Forestry, Fire and State Lands and the Division of State History of the discovery of such remains.
5. The operator is required to comply with the requirements of Great Salt Lake Management Plan and Rule R657-15 prohibiting boat travel within one mile of Hat Island and other islands such as those in west Carrington Bay that are used for nesting by birds.
 - Contact W. Clay Perschon, Great Salt Lake Project Leader (801) 538-4809

Page two

DOSECC, Inc. Conditions of Approval 3

June 7, 2000

6. The operator is required to meet with Utah Division of Wildlife Resources (UDWR) regarding travel near Antelope Island so the experiments being conducted with live birds held in pens will not be compromised. The operator shall also meet with UDWR regarding examination of some of the fresh sediments removed from the lake for brine shrimp and lake algae studies.
 - Contact W. Clay Perschon, Great Salt Lake Project Leader (801) 538-4809
7. The operator will ensure boats will avoid driving through large flocks of birds on the water. It is unlawful to rally or harass wildlife.
8. The operator will make provisions to haul litter back to shore and ensure there is no disposal of hardware or fuel spills in the lake.
9. Upon completion of drilling, the operator shall plug the hole(s) by mixing a heavy bentonite slurry and placing it in the hole(s) to fill the hole(s) from bottom to top which will prevent contaminants from mixing with lake water.
10. The drilling project should be completed prior to October 1, 2000, which begins the brine shrimp harvesting season.
11. The operator will contact the Antelope Island State Park Manager regarding a special use permit for use of the marina. Any other special requirements of drilling operations and use of state park facilities will be coordinated through the respective park manager.
12. The operator will comply with standard navigational and boating safety requirements as specified by the respective state park manager.
13. The operator shall maintain general liability insurance in an aggregate amount of \$2,000,000 for the duration of drilling operations as evidenced by the certificate of Liability dated June 6, 2000, delivered to the Department of Natural Resources. Additionally, such liability insurance shall be renewed as necessary in order to maintain the validity of this approval.

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

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <u>Sediment Sample</u>		5. LEASE DESIGNATION AND SERIAL NUMBER:
b. TYPE OF WORK: NEW <input checked="" type="checkbox"/> HORIZ. <input type="checkbox"/> DEEP- <input type="checkbox"/> RE- <input type="checkbox"/> DIFF. <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: DOSECC, Inc		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: P.O. Box 58857 CITY Salt Lake City STATE UT ZIP 84158		8. WELL NAME and NUMBER: GLAD1-GSL00, Site 3A
4. LOCATION OF WELL (FOOTAGES) 40 - 53' 48.514" N 112 - 14' 45.905" W		9. API NUMBER: 4301130007
AT TOP PRODUCING INTERVAL REPORTED BELOW:		10. FIELD AND POOL, OR WILDCAT:
AT TOTAL DEPTH: 40 - 53' 48.514" N 112 - 14' 45.905" W		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 24 2N 4W
14. DATE SPUDDED: 8/22/2000	15. DATE T.D. REACHED: 8/23/2000	12. COUNTY Davis
16. DATE COMPLETED: 8/23/2000	ABANDONED <input checked="" type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>	13. STATE UTAH
17. ELEVATIONS (DF, RKB, RT, GL): 7.58 bel water surf	18. TOTAL DEPTH: MD 57 TVD 57	21. DEPTH BRIDGE MD PLUG SET: TVD
19. PLUG BACK T.D.: MD TVD	20. IF MULTIPLE COMPLETIONS, HOW MANY? *	22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) None
23. WAS WELL CORED? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit analysis)		
WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report)		
DIRECTIONAL SURVEY? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit copy)		

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

- ELECTRICAL/MECHANICAL LOGS
 GEOLOGIC REPORT
 DST REPORT
 DIRECTIONAL SURVEY
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION
 CORE ANALYSIS
 OTHER: _____

30. WELL STATUS:

Abandoned

RECEIVED
 SEP 13 2000
 DIVISION OF OIL, GAS AND MINING

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

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER:
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME:
8. WELL NAME and NUMBER:
GLAD1-GSL00, Site 3B
9. API NUMBER:
4301130007
10. FIELD AND POOL, OR WILDCAT:
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
NESE 24 2N 4W
12. COUNTY: **Davis** 13. STATE: **UTAH**

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER **Sediment Sample**
b. TYPE OF WORK: NEW HORIZ. DEEP- RE- DIFF.
2. NAME OF OPERATOR:
DOSECC, Inc
3. ADDRESS OF OPERATOR: **P.O. Box 58857** CITY **Salt Lake City** STATE **UT** ZIP **84158** PHONE NUMBER: **(801) 585-6855**
4. LOCATION OF WELL (FOOTAGES):
40 - 53.815' N 112 - 14.595' W
AT TOP PRODUCING INTERVAL REPORTED BELOW:
AT TOTAL DEPTH: **40 - 53.815' N 112 - 14.595' W**
14. DATE SPUDDED: **8/24/2000** 15. DATE T.D. REACHED: **8/24/2000** 16. DATE COMPLETED: **8/24/2000** ABANDONED READY TO PRODUCE
17. ELEVATIONS (DF, RKB, RT, GL):
7.55 bel water surf
18. TOTAL DEPTH: MD **23** 19. PLUG BACK T.D.: MD TVD **23** 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 21. DEPTH BRIDGE MD PLUG SET: TVD
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each):
None
23. WAS WELL CORED? NO YES (Submit analysis)
WAS DST RUN? NO YES (Submit report)
DIRECTIONAL SURVEY? NO YES (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS 27. PERFORATION RECORD

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS: ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: _____

30. WELL STATUS: **Abandoned**

SITE SUMMARY, GLAD1-GSL00, SITE 3

Site: GLAD-1-GSL00-3, Holes A and B

Position: Approx. 1 km West of Antelope Island, Great Salt Lake, Utah.

Hole A: 40° 53' 48.514" N 112° 14' 45.905" W

Hole B: 40° 53.815' N 112° 14.595' W

Water Depth:

Hole A: 7.58 m

Hole B: 7.55 m

Sediment Thickness: approx. 1300 m

Penetration Depth:

Hole A: 57.3 m

Hole B: 22.86 m

Seismic Coverage: Line 98GSL11 (Dinter and Pechman, 1999), chirp and Geopulse.

Objectives: The objectives of GLAD-1-GSL00-3A and GLAD-1-GSL00-3B were to:

Test operations, procedures, and tools of the GLAD800 rig with cores of 50 m.

Core the hanging wall block of the Great Salt Lake Fault to define neotectonic fault movements over the last glacial cycle (to OIS-6: 140ka) (Science Module 1)

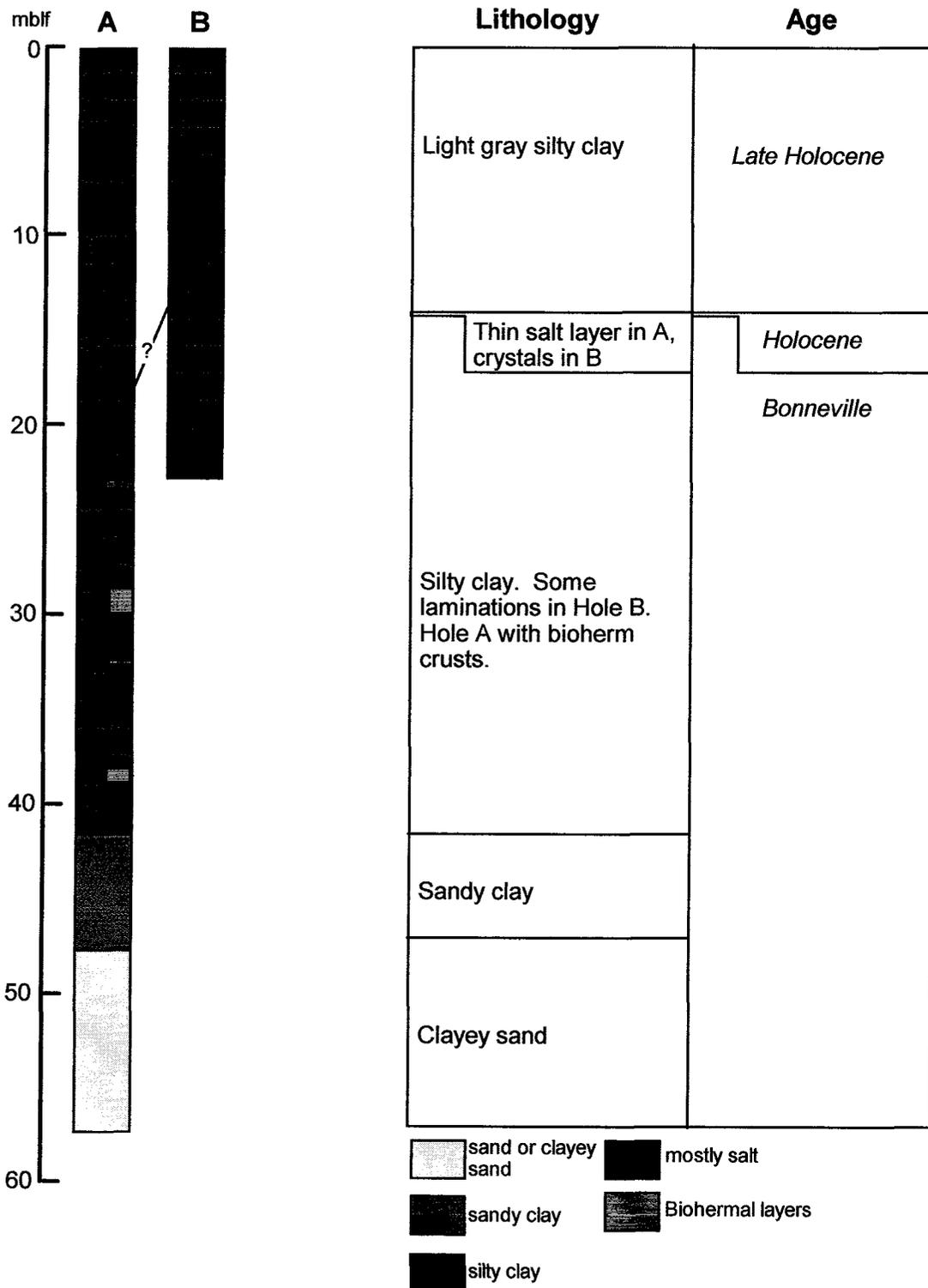
Define paleoclimate sequences over the last glacial cycle (to OIS-6: 140ka). (Science Module 2)

Logging and Downhole: None

Nature Of Sediment: Silty clay, in places with bioherm crusts. Sandy clay, clayey sand. Thin salt layer.

01-11-2000
01-11-2000
01-11-2000
01-11-2000

Field Summary of Site GLAD1-GSL00-3



RESEARCH
 DIVISION
 U.S. GEOLOGICAL SURVEY
 WASHINGTON, D.C. 20508

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

34. FORMATION (Log) MARKERS:

35. ADDITIONAL REMARKS (Include plugging procedure)

All Measurements are in Meters

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

NAME (PLEASE PRINT) Dennis L. Nielson TITLE Executive Director of DOSECC
 SIGNATURE *D. Nielson* DATE 10/11/2000

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
 1594 West North Temple, Suite 1210
 Box 145801
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
 Fax: 801-359-3940

