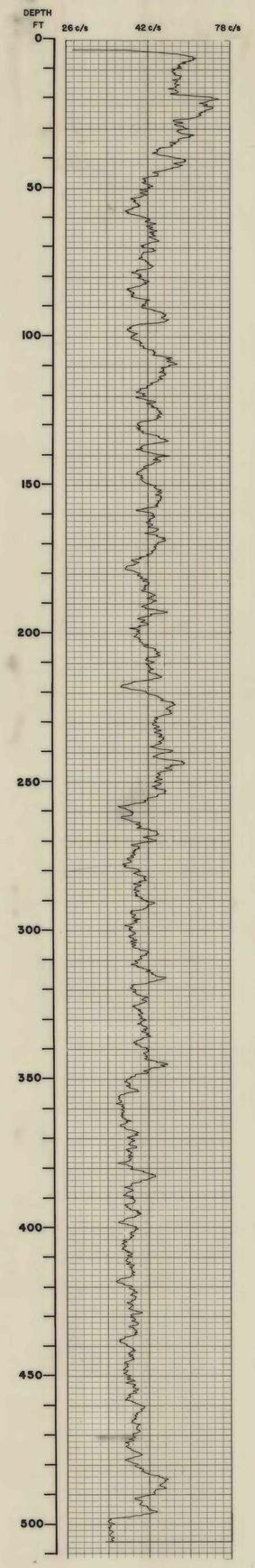
OPEN-FILE REPORT 80-1277

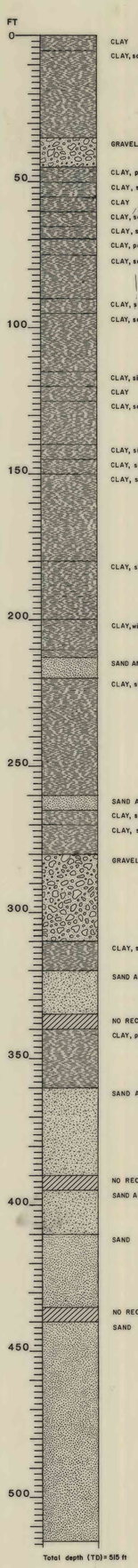
GAMMA-RAY LOG

FORD DRY LAKE NO. 1A

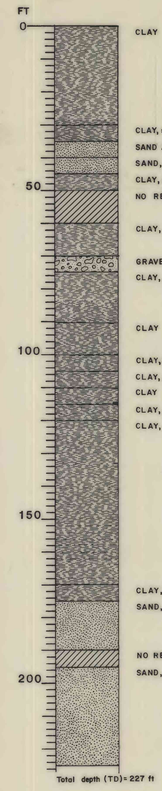


COLUMNAR SECTIONS

FORD DRY LAKE NO. 1A



FORD DRY LAKE NO. 1B



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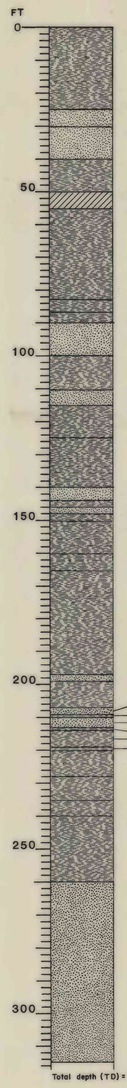
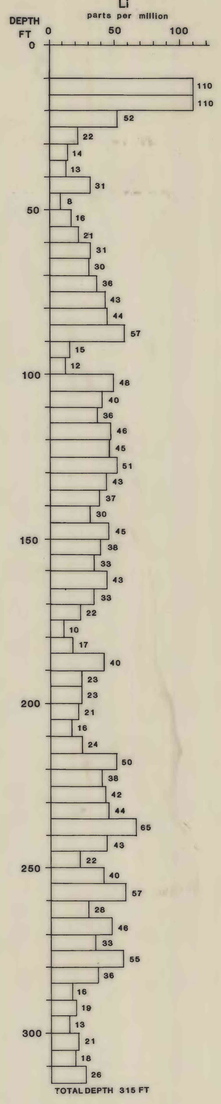
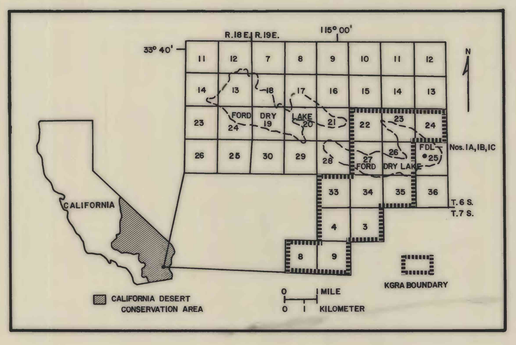


LITHIUM ANALYSIS

(J.D. VINE, 1978, WRITTEN COMMUN.)

FORD DRY LAKE NO. 1C





INDEX MAP

LITHOLOGIC LOGS

Lithologic log of Ford Dry Lake Test Well No. 1 A

Depth (feet)	Description
0 - 5	Clay, light-brown (5YR 5/6, wet), high plasticity, calcareous; minor sand
5 - 15	Clay, sandy, light-brown (5YR 5/6, wet), high plasticity, calcareous; about 5 percent fine sand
15 - 25	Clay, sandy, light-brown (5YR 5/6, wet), high plasticity, calcareous; sand content increasing to 15 percent; 1-3 percent granules
25 - 30	Clay, sandy, light-brown (5YR 5/6, wet), high plasticity, calcareous; sand content decreasing to 5-10 percent; granules increasing to 5-10 percent
30 - 35	Clay, sandy, light-brown (5YR 5/6, wet), calcareous; sand content increasing to 15-20 percent; granules increasing to 5-10 percent
35 - 40	Gravel, clayey, 75 percent of sample consists of quartzite pebbles, granules, and sand; 25 percent light-brown (5YR 5/6, wet) calcareous clay interbeds
40 - 45	Gravel, clayey, quartzite pebbles as large as 20 mm; grayish-orange-pink (5YR 7/2, damp) calcareous clay matrix; abundant coarse sand
45 - 50	Clay, pebble, moderate-brown (5YR 5/4, damp), calcareous; 15 percent pebbles as large as 10 mm; minor sand in clay
50 - 55	Clay, sandy, light-brown (5YR 6/4, damp) high plasticity, noncalcareous; 1-3 percent medium sand
55 - 60	Clay, light-brown (5YR 6/4, damp), high plasticity, noncalcareous
60 - 65	Clay, sandy, light-brown (5YR 5/6, damp), high plasticity, noncalcareous; minor sand in clay
65 - 70	Clay, silty; light-brown (5YR 5/6, damp); abundant calcareous silt; rare scattered coarse sand and granules
70 - 75	Clay, pebbly, light-brown (5YR 5/6, damp), high plasticity, calcareous; 10 percent granules; 1-3 percent medium sand; interbedded calcareous siltstone
75 - 80	Clay, sandy, light-brown (5YR 5/6, damp), high plasticity, calcareous; minor coarse sand
80 - 85	Clay, sandy, light-brown (5YR 5/6, damp), high plasticity, calcareous; 1-3 percent coarse sand
85 - 90	Clay, sandy, interbedded light-brown (5YR 5/6, damp) and pale-yellowish-brown (10YR 6/2, damp) clay, high plasticity, calcareous; 5 percent coarse sand
90 - 95	Clay, silty, reddish-brown (5YR 5/3, damp), low plasticity, calcareous; 5 percent coarse sand
95 - 100	Clay, sandy, light-reddish-brown (5YR 6/3, damp), high plasticity, calcareous; 1-3 percent coarse sand
100 - 110	Clay, sandy, similar to 95-100 ft interval except sample has low plasticity
110 - 115	Clay, sandy, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; 5 percent very fine sand, 1-3 percent very coarse sand
115 - 120	Clay, silty, light-reddish-brown (5YR 6/3, damp), high plasticity, calcareous; less than 5 percent granules
120 - 125	Clay, sandy, light-reddish-brown (5YR 6/3, damp), high plasticity, calcareous; 1-3 percent very coarse sand
125 - 135	Clay, sandy, light-reddish-brown (5YR 6/4, damp), moderate plasticity, calcareous; abundant fine sand interbeds
135 - 140	Clay, sandy, light-reddish-brown (5YR 6/3, damp), high plasticity, slightly calcareous; fine sand decreasing scattered granules
140 - 145	Clay, silty, light-reddish-brown (5YR 6/3, damp), low plasticity, slightly calcareous; abundant silt
145 - 150	Clay, sandy, light-reddish-brown (5YR 6/3, damp), moderate plasticity, slightly calcareous; 10 percent very coarse sand; 1 percent granules
150 - 160	Clay, silty, light-reddish-brown (5YR 6/4, damp), moderate plasticity, calcareous; abundant silt; 1-3 percent very coarse sand
160 - 165	Clay, silty, light-reddish-brown (5YR 6/3, damp), high plasticity, calcareous; abundant very fine sand and silt
165 - 170	Clay, silty, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; 10 percent very coarse sand and granules
170 - 175	Clay, silty, mottled reddish-brown (5YR 5/3, damp) and yellowish-red (5YR 5/6, damp) moderate plasticity, calcareous; less than 5 percent very coarse sand and granules
175 - 180	Clay, silty, weak-red (2.5YR 5/2, damp), similar to 170-175 ft interval except color
180 - 195	Clay, sandy, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; 20 percent very fine sand; 15 percent granules
195 - 200	Clay, sandy, light-reddish-brown (5YR 6/3, damp), similar to 180-195 ft interval except color
200 - 205	Clay, with granules, light-reddish-brown (5YR 6/4, damp), high plasticity, calcareous; interbedded fine sand not recovered from drilling mud
205 - 210	Clay, with granules, reddish-gray (5YR 6/2, damp), similar to 200-205 ft interval except color; pale-yellowish-brown (10YR 6/2, damp) shale chips recovered
210 - 213	Clay, with granules, moderate-brown (5YR 5/4, damp), calcareous; 5 percent granules
213 - 220	Sand and clay, interbedded, very coarse sand and interbedded moderate-brown (5YR 5/4, damp) calcareous clay
220 - 230	Clay, silty, pinkish-gray (5YR 6/2, damp), low to moderate plasticity, calcareous; traces of very coarse sand
230 - 250	Clay, silty, pinkish-gray (5YR 6/2, damp), high plasticity, calcareous
250 - 255	Clay, silty, brown (7.5 YR 5/2, damp), similar to 230-250 ft interval except color
255 - 260	Clay, silty, pinkish-gray (5YR 6/2, damp), similar to 230-250 ft interval
260 - 265	Sand and gravel, pinkish-gray (5YR 6/2, damp), very poor sand and gravel recovery; calcareous clay interbeds
265 - 270	Clay, sandy, pinkish-gray (5YR 6/2, damp), low plasticity, dense, calcareous
270 - 280	Clay, silty, pale-brown (5YR 5/2, damp), moderate plasticity, calcareous
280 - 295	Gravel, granule and pebble, pinkish-gray (5YR 6/2, damp); calcareous clay interbeds
295 - 310	Gravel, granule and pebble; similar to 265-295 ft interval except color is brown (10YR 5/3, damp)
310 - 320	Clay, sandy, pale-brown (10YR 6/3, damp), calcareous, 97 percent; 3 percent very coarse sand; less than 1 percent granules
320 - 335	Sand, clayey, very poorly sorted, very coarse sand, 30-40 percent; 5-10 percent granules; 5-10 percent pebbles; grayish-brown (10YR 5/2, damp) calcareous clay matrix
335 - 340	No recovery
340 - 360	Clay, sandy, light-reddish-brown (5YR 6/3, damp), high plasticity; abundant fine sand, lesser amounts of granules and pebbles
360 - 370	Sand and gravel, very coarse sand and granule gravel; very poor recovery of sand and gravel to total depth; no matrix recovered
370 - 375	Sand and gravel, 70 percent very coarse sand; 15-20 percent granule gravel; 10 percent grayish-orange-pink (5YR 7/2, damp) calcareous clay interbeds
375 - 390	Sand and gravel, very coarse sand and granule gravel; similar to 360-370 ft interval
390 - 395	No recovery
395 - 410	Sand and gravel, very coarse sand and granule gravel; similar to 360-370 ft interval
410 - 435	Sand, coarse to very coarse
435 - 440	No recovery
440 - 480	Sand, very coarse; minor granule gravel
480 - 485	Sand, very coarse; minor shale chips
485 - 515	Sand, very coarse; minor granule gravel; similar to 440-480 ft
515	Total depth

Lithologic log of Ford Dry Lake Test Well 1B

Depth (feet)	Description
0 - 5	Clay, reddish-brown (5YR 5/6, damp), low plasticity, calcareous; 1-3 percent coarse sand
5 - 10	Clay, reddish-brown (5YR 5/4, damp), moderate plasticity, calcareous; 3-5 percent sand; 1 percent granules
10 - 15	Clay, reddish-brown (5YR 5/4, damp), moderate plasticity, calcareous; 1-3 percent coarse sand; 1 percent granules
15 - 20	Clay, reddish-yellow (5YR 6/6, damp), low plasticity, calcareous; 1 percent coarse sand; granules decreasing to trace amounts
20 - 25	Clay, reddish-yellow (5YR 6/6, damp), high plasticity, calcareous; 1 percent coarse sand; trace of granules
25 - 30	Clay, reddish-yellow (5YR 6/6, damp), high plasticity, calcareous; trace of very coarse sand and granules
30 - 35	Clay, sandy, light-reddish-brown (5YR 6/3, damp), calcareous; abundant very coarse sand and granules; 1 percent pebbles
35 - 40	Sand and gravel, clayey sand and pebbly gravel; 70-80 percent medium to coarse sand 15-20 percent angular to subangular pebble gravel; light-reddish-brown (5YR 6/3, damp) calcareous clay matrix (probably interbedded)
40 - 45	Sand, pebbly, 60 percent medium sand; 10-20 percent pebbles; 5 percent granules; light-reddish-brown (5YR 6/3, damp) calcareous clay matrix
45 - 50	Clay, pebbly, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; 5-10 percent sand; 20 percent pebbles
50 - 60	No recovery
60 - 70	Clay, sandy, brown (7.5YR 5/3, damp) moderate plasticity, calcareous; very fine sand with scattered granules
70 - 75	Gravel, granule, brown (7.5YR 5/3, damp), calcareous clay matrix
75 - 85	Clay, sandy, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; minor coarse sand and granules
85 - 90	Clay, sandy, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous
90 - 100	Clay, reddish-brown (5YR 5/3, damp), high plasticity, calcareous
100 - 105	Clay, with granules, reddish-brown (5YR 5/3, damp), moderately plastic, calcareous clay; 5 percent granules in clay
105 - 110	Clay, silty, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous; minor coarse to very coarse sand
110 - 115	Clay, reddish-brown (5YR 5/4, damp), high plasticity, calcareous
115 - 120	Clay, sandy, reddish-brown (5YR 5/4, damp), moderate plasticity, calcareous; 15 percent very fine sand with some very coarse sand and granules
120 - 125	Clay, silty, pinkish-gray (5YR 6/2, damp), low plasticity, calcareous; 15-20 percent silt and very fine sand
125 - 130	Clay, silty, reddish-brown (5YR 5/3, damp), very low plasticity, calcareous, brittle; 10-15 percent silt
130 - 140	Clay, silty, reddish-brown (5YR 5/3, damp), similar to 125-130 ft interval, except sample shows moderate plasticity
140 - 145	Clay, silty, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous; shale chips in clay; minor amounts of very coarse sand
145 - 150	Clay, silty, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous; 2-3 percent granules in clay
150 - 155	Clay, silty, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous; 3-5 percent granules and small cobbles
155 - 160	Clay, silty, reddish-brown (5YR 5/3, damp), low plasticity, calcareous; abundant very fine sand and silt
160 - 165	Clay, silty, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; 3-5 percent very fine sand
165 - 170	Clay, silty, reddish-brown (5YR 5/3, damp), high plasticity, calcareous; traces of carbonized plant fragments (possible contamination from shallower depths)
170 - 175	Clay, sandy, reddish-brown (5YR 5/3, damp), moderate plasticity, calcareous; 10 percent very fine sand
175 - 190	Sand, clayey, moderately well sorted, fine sand; light-reddish-brown (5YR 5/3, damp) calcareous clay matrix
190 - 195	No recovery
195 - 200	Sand, clayey, similar to 175-190 ft interval
200 - 225	Sand, clayey, similar to 175-190 ft interval except color is brown (10YR 5/3, damp)
225	Lost circulation
227	Artesian flow plugged with 75 lb/ft^3 mud
227	Total depth

Lithologic log of Ford Dry Lake Test Well No. 1 C

Depth (feet)	Description
0 - 25	Clay, moderate-brown (5YR 4/4, dry), calcareous
25 - 30	Sand and gravel, very poorly sorted sand with abundant granule gravel; subangular to subrounded, medium pebbles; light-brown (5YR 5/6, dry) calcareous clay matrix
30 - 40	Sand, pale-yellowish-brown (10YR 6/2, damp), poorly sorted, calcareous; Includes clasts of very coarse grained sandstone and quartzite
40 - 45	Clay, grayish-orange-pink (5YR 7/2, damp), calcareous; minor fine sand
45 - 50	Clay, grayish-orange-pink (5YR 7/2, damp); includes minor small pebbles and granules of subrounded calcareous sandstone
50 - 55	No recovery
55 - 65	Clay, grayish-orange-pink (5YR 7/2, damp); same as 45-50 ft interval
65 - 75	Clay, pale-yellowish-brown (10YR 6/2, damp); similar to 45-50 ft interval, except color
75 - 80	Clay, pale-yellowish-brown (10YR 6/2, damp), calcareous
80 - 83	Clay, pale-yellowish-brown (10YR 6/2, damp), calcareous; trace amounts of medium to coarse, subangular to subrounded sand
83 - 85	Clay, pale-yellowish-brown (10YR 6/2, damp), calcareous; minor interbedded sand
85 - 87	Clay, light-brown (5YR 6/4, damp); similar to 83-85 ft interval except color
87 - 90	Clay, light-brown (5YR 6/4, damp), calcareous; trace amounts of brittle, calcareous claystone
90 - 100	Sand, pale-yellowish-brown (10YR 6/2, damp), fine to very fine sand, well-sorted, subrounded quartz grains; traces of clay
100 - 105	Clay, light-brown (5YR 5/6, damp), calcareous
105 - 110	Clay, light-brown (5YR 5/6, damp), calcareous; traces of very coarse sand
110 - 111	Clay, pale-yellowish-brown (10YR 6/2, damp), calcareous
111 - 115	Sand, pale-yellowish-brown (10YR 6/2, damp), very poor sand recovery; clay interbeds; water-bearing zone
115 - 125	Clay, moderate-brown (5YR 4/4, damp), calcareous
125 - 135	Clay, sandy, dark-yellowish-brown (10YR 4/2, damp), calcareous; abundant coarse to very coarse sand; interbedded sandstone lenses
135 - 140	Clay, light-brown (5YR 6/4, damp), calcareous; very fine sand
140 - 144	Sand, light-brown (5YR 6/4, damp), medium to fine sand; minor calcareous clay
144 - 146	Clay, light-brown (5YR 6/4, damp), calcareous
146 - 148	Sand, no recovery
148 - 150	Clay, light-brown (5YR 6/4, damp), calcareous;
150 - 160	Clay, sandy, pale-yellowish-brown (10YR 6/2, damp), calcareous; abundant very fine sand and silt
160 - 165	Clay, moderate-yellowish-brown (10YR 5/4, damp), calcareous; includes grayish-orange (10YR 7/4, dry) claystone
165 - 175	Clay, sandy, light-brown (5YR 6/4, damp), calcareous; abundant very fine sand or silt
175 - 185	Clay, light-brown (5YR 6/4, damp), calcareous; Includes interbeds of indurated, calcareous silty claystone
185 - 190	Clay, pale-yellowish-brown (10YR 6/2, damp), similar to 175-185 ft interval except color
190 - 195	Clay, moderate-brown (5YR 4/4, damp), similar to 175-185 ft interval except color
195 - 197	Clay, light-brown (5YR 6/4, damp), calcareous
197 - 199	Sand, clayey, light-brown (5YR 6/4, damp), very fine, subangular to subrounded grains; calcareous clay; produced abundant water
199 - 200	Clay, light-brown (5YR 6/4, damp), calcareous
200 - 202	Clay, dark-yellowish-brown (10YR 4/2, damp), calcareous
202 - 207	Clay, dark-yellowish-brown (10YR 4/2, damp), calcareous
207 - 209	Sand, dark-yellowish-brown (10YR 4/2, damp), very fine sand; interbeds of silty limestone; poor recovery
209 - 210	Clay, dark-yellowish-brown (10YR 4/2, damp), calcareous
210 - 213	Sand, dark-yellowish-brown (10YR 4/2, damp), very fine calcareous sand; very poor recovery
213 - 214	Claystone, light-brown (5YR 5/6, damp), calcareous, brittle
214 - 219	Clay, silty, dark-yellowish-brown (10YR 4/2, damp), calcareous; claystone interbeds; minor very fine sand
219 - 220	Clay, medium-light-gray (N-6)
220 - 228	Clay, silty, pale-yellowish-brown (10YR 6/2, damp), calcareous; minor subangular, coarse sand
228 - 235	Clay, moderate-yellowish-brown (10YR 5/4, damp), high plasticity, calcareous
235 - 240	Clay, dark-yellowish-brown (10YR 4/2, damp), calcareous clay, high plasticity; very fine sand interbeds
240 - 255	Clay, pale-yellowish-brown (10YR 6/2, damp), calcareous; includes very coarse grained calcareous sandstone
255 - 260	Clay, olive-gray (5Y 4/1, damp), similar to 240-255 ft interval except color
260 - 287	Sand, light-olive-gray (5Y 6/1, damp), calcareous, subangular to subrounded quartz grains; thin claystone interbeds; minor amount of silt and clay
287 - 295	Sand, similar to 260-287 ft interval except unit contains no clay or silt
295 - 315	Sand, light-olive-gray (5Y 6/1, damp), similar to 287-295 ft interval except unit contains resistant interbedded sandstone
315	Total depth

Chemical analysis of groundwater from water well at roadside rest area approximately 3 miles east of Ford Dry Lake, California (Analysis by U.S. Geological Survey, Menlo Park, California)

Town well-sample No.	Date sample collected	Sample depth (ft)	Field pH	Temperature, water (°C)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO$_3$)	Sulfate (SO$_4$)	Chloride (Cl)	Fluoride (F)	Silica (SiO$_2$)	Boron (B)
					mg/l									ug/l
Roadside rest water well (see text for location)	3/16/78	900	7.7	45.5	63	0.75	830	15	63	440	990	5.8	43	1500

INTRODUCTION

DISCUSSION

The Federal Land Policy and Management Act of 1976 (Public Law 94-579) directed the Secretary of the Interior to prepare and implement by September 1980 a comprehensive long-range plan for the management, use, development, and protection of public lands within the California Desert Conservation Area (CDCA). The responsibility to prepare this plan was assigned to the Bureau of Land Management's (BLM) California Desert Planning Staff. The BLM was directed to evaluate mineral as well as botanical, wildlife, cultural, and recreation resource data for effective multiple-use land planning. In turn, the BLM requested assistance from the U.S. Geological Survey (USGS) in defining the mineral resources.

In 1978 the USGS drilled 56 shallow test wells to depths of 50-600 ft to provide BLM with the requested mineral resource data. The lithologic, geophysical, and water quality data obtained from test wells drilled on Ford Dry Lake, Calif., are presented in this report.

LOCATION AND DRILLING METHODS

Three test wells were drilled in the SE¼NW¼ sec. 25, T. 6 S., R. 19 E., SBM, California. Ford Dry Lake No. 1A was located at latitude 33°37'24" N., longitude 114°52'08" W. Ford Dry Lake Nos. 1B and 1C were redrills of test well FDL No. 1A which collapsed on withdrawal of the drill pipe. Test well No. 1B was located 88 ft due east of FDL No. 1A. Test well FDL No. 1C was located 102 ft northeast of FDL No. 1A on a bearing of N. 60 E.

Test wells FDL No. 1A and FDL No. 1B were drilled on Ford Dry Lake in March 1978 using a conventional rotary drill and bentonite drilling mud to depths of 515 ft and 227 ft respectively. Synthetic additives were mixed with the drilling mud to seal the test well from ground water infiltration and artesian flow.

Ford Dry Lake has been classified by the USGS as a Known Geothermal Resources Area (KGRA) as a result of the filing of overlapping noncompetitive geothermal lease applications on Federal lands within a 30-day period. The Ford Dry Lake KGRA was established by the USGS Conservation Division by the signing of the California KGRA Minutes No. 17 of the Mineral Land Evaluation Committee dated May 30, 1975. A test well was to be completed as a temperature-observation well for data collection by personnel of the USGS Geologic Division. Due to the collapse of test well FDL No. 1A and artesian flow in FDL No. 1B, a third test well was drilled in April 1978 using a reverse-circulation drill rig. Drilling fluids, either air, water, or a combination of air and water, were passed down the outer annulus of dual-wall drill pipe to an open-face insert bit. Drilling fluids mixed with sediment cuttings were forced up the inner annulus of the drill pipe to the surface where samples were collected. This drilling technique ensured recovery of uncontaminated sediment or ground-water samples because the return cuttings or ground-water samples were not in contact with the bore well. In situ ground water was used as a drilling fluid where possible; otherwise, a fine mist of imported fresh water and air was used.

The temperature-observation well was completed using the reverse-circulation technique. The test well was drilled to the desired depth. The 11-inch steel pipe, with the bottom cap in place, was lowered inside the inner annulus of the drill pipe. The opening of the drill bit was large enough to allow the steel pipe to pass through. The drill pipe was then pulled, leaving the temperature-observation pipe in place. The minimum desirable depth of the temperature-observation pipe was 500 ft. Drilling problems with a "running sand" were encountered at a depth of 315 ft; therefore, drilling was terminated and the temperature-observation hole was completed at the 315-ft depth rather than at the more desirable 500-ft depth.

A continuous lithologic log was completed during drilling. Sediment samples were collected at 5-ft intervals and were described in the field. Field lithologic descriptions were supplemented by microscopic study when the samples were returned to the laboratory. Sediment names used in this report are those defined by Folk (1968). The rock-color chart (Goddard and others, 1948) was used to color classify damp to wet samples. Lithologic percentages are approximate.

Drill cuttings were analyzed for lithium (Li) by the USGS in Denver, Colo. Lithium analyses are included in this report to complete the mineral resource appraisal on Ford Dry Lake.

WATER QUALITY

A ground-water sample was collected and analyzed in the field by R. H. Hartmer, USGS Water Resources Division, Menlo Park, Calif. The water sample was collected from a well at the roadside rest area at the intersection of Wiley Well Road and Interstate Highway 10, approximately 3 miles east of Ford Dry Lake and 17 miles West of Blythe (NW¼SE¼NW¼ sec. 33 T. 6 S., R. 20 E., SBM).

The chemical analysis of the sample collected from this well is listed in the chemical analysis table.

GEOPHYSICAL LOG

A gamma-ray log was completed from the land surface to a drilled depth of 506 ft. The log was run through the drill string because the plugs sediments would have squeezed in or collapsed and sealed the test well before conventional open-hole logs could be completed. Since the geophysical log was run through the drill string, a correction of the natural radioactivity, measured in counts per second must be made before an interpretation of the gamma-ray log is possible. The necessary data for the correction described on Schlumberger Chart GR-2 are listed below. Even after correction only a qualitative interpretation of natural radioactivity is possible because the scale was not calibrated.

Test well diameter: 5.125 in.	Total thickness of dual-wall drill pipe: 0.28 in.
Drill string inner diameter: 1.815 in.	Sonde outer diameter: 1.125 in.
Drill string outer diameter: 2.875 in.	Logging speed: 17 ft/min

ACKNOWLEDGEMENTS

J. D. Cathcart, U.S. Geological Survey, Denver, Colo., ran geophysical logs of the subsurface. G. T. Server supplemented field lithologic descriptions by laboratory study of sediment cuttings under binocular microscope.

REFERENCES

Folk, R. L., 1968, Petrology of sedimentary rocks: Austin, University of Texas, 170 p.

Goddard, E. N., chm., and others, 1948, Rock-color chart: National Research Council; reprinted by Geological Society of America, 1951, 1963, 1970, 6 p.

Schlumberger Well Services, [1975], Cased hole applications, 1975 Edition: Houston, Texas, 124 p.

CONVERSION FACTORS

Multiply English unit	By	To obtain metric units
Inches (in.)	2.540	Centimeters (cm)
Feet (ft)	0.305	Meters (m)
Miles (mi)	1.609	Kilometers (km)

This report has not been edited for conformity with U.S. Geological Survey editorial standards.

GEOPHYSICAL AND LITHOLOGIC DATA FROM TEST WELLS ON FORD DRY LAKE, RIVERSIDE COUNTY, CALIFORNIA

By

Tully R. Simoni Jr.

1980