

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 82-20

WASTE DISCHARGE REQUIREMENTS
FOR
TOMAHAWK OIL AND MINERALS, INC.
NATURAL GAS WELL
South of Salton City Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Tomahawk Oil and Minerals, Inc. (hereinafter also referred to as the discharger), 77 No. Oak Knoll Avenue, Pasadena, CA 91101, submitted a Report of Waste Discharge, dated February 15, 1982.
2. The discharger proposes to drill a natural gas well, referred to as San Felipe No. 1, to be located at the southwest corner of the NE 1/4 of the NE 1/4 of Section 29, T11S, R10E, SBB&M.
3. An unlined mud sump, 135 feet by 25 feet by 12 feet deep with an approximate capacity of 252,500 gallons would be constructed at the well site.
4. The discharger proposes to discharge into the mud sump a maximum of 252,000 gallons of drilling mud. Following some evaporation, the residual mud would be removed from the sump and discharged at a solid waste disposal site approved by the Regional Board to receive this waste.
5. The drilling mud components which may be used are:

Bentonite	Barite
Lignite	Sodium Hydroxide
Sodium Bicarbonate	Sodium Carboxymethyl Cellulose
6. Geothermal brines in portions of Imperial County are known to contain certain constituents which are classified as hazardous by the Department of Health Services, Hazardous Materials Management Section. Said hazardous wastes must be discharged at approved Class I or Class II-1 disposal sites.
7. The Water Quality Control Plan for the West Colorado River Basin was adopted on April 10, 1975. The Basin Plan contains water quality objectives for the West Salton Sea Hydrologic Unit.

*Rescinded
by 82-53
11/17/82*

8. The ground water of this area is not beneficially used and is brackish in quality. A water sample taken from a well about four miles north of the site had a total dissolved solids content of about 5,000 mg/l.
9. Imperial County Planning Department certified on February 11, 1982 Mitigated Negative Declaration EA 1304-82 for this proposed well. This report stipulates that if the conditions set forth are adhered to, this project would not have any significant adverse effects on water quality.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
11. The Board in a public meeting heard and considered all comments pertaining to the discharge.
12. Imperial County Planning Department has required that the discharger post a blanket bond in the sum of \$50,000 to "indemnify the County for any costs incurred by the County in repairing any drill, test or production facility site, to as near as possible to its original state, and in abating any public nuisance caused by the principal's exploratory, testing, or producing operations."

IT IS HEREBY ORDERED, Tomahawk Oil and Minerals, Inc. shall comply with the following:

A. Discharge Specifications

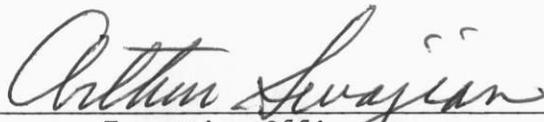
1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. Drilling mud and other wastes shall not enter any drainage channels which could provide flow or seepage to Salton Sea.
3. Permanent disposal of drilling mud or any wastes is prohibited at the well site.
4. Adequate protective works and maintenance shall be provided to assure that the sump will not become eroded or otherwise damaged during the project period, and/or until all well drilling materials are removed.

5. A minimum freeboard of at least two (2) feet shall be maintained in the sump.
6. The following materials shall not be discharged at other than a Class I disposal site, or at a Class II-1 disposal site approved by the Regional Board to receive said material:
 - a. Saline drilling muds with extractable water containing a total dissolved solids concentration exceeding 6000 mg/l.
 - b. Brine and salt wastes.
 - c. Materials containing hazardous wastes in wet-weight concentrations exceeding any of the threshold limits contained in Attachment A.
7. Other drilling muds shall not be discharged at other than a Class II-2 disposal site, or at a more restrictive (Class I or appropriate Class II-1) disposal site.
8. Final disposal of residual wastes in accordance with Specifications No. 6 and 7 (above), and cleanup of all contents, shall be accomplished upon abandonment of operations. Lack of construction or operational activity on the site for a period of one year shall constitute abandonment for the purposes of this Order.

B. Provisions

1. The discharger shall comply with "Monitoring and Reporting Program No. 82-20" and future revisions thereto, as specified by the Executive Officer.
2. At least five days prior to the discharge of any materials into the mud sump, the discharger shall submit to the Regional Board a technical report showing the construction of the sump, and a certificate signed by a California Registered Civil Engineer stating that the sump and attendant facilities are constructed to meet the requirements of this Order.
3. The discharger shall submit to the Board, at least 30 days prior to commencement of operation, a written report on the proposed method and estimated costs of cleanup and closure of the well site in a manner that will not adversely effect water quality.

I, Arthur Swajian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region on May 19, 1982.


Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ATTACHMENT A

Threshold Limit Concentrations for Persistent
Bioaccumulative Toxic Substances

Drilling mud, cuttings, and other wastes containing the following substances having concentrations equal to or greater than those listed below are designated as hazardous by the State of California Department of Health Services.

	<u>Soluble Threshold Limit wet weight mg/kg</u>	<u>Total Threshold Limit wet weight mg/kg</u>
1. Arsenic and compounds	5	50
2. Barium (excluding barite) and compounds	100	1,000
3. Lead compounds, inorganic	5	50
4. Lead compounds, organic	--	13
5. Zinc compounds	20	200

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 82-20

FOR

TOMAHAWK OIL AND MINERALS, INC.

NATURAL GAS WELL

South of Salton City - Imperial County

Location: Section 29, T11S, R10E, SBB&M

MONITORING

Tomahawk Oil and Minerals, Inc. shall report monitoring data to the Regional Board in accordance with the following schedule:

1. At least five days prior to the discharge of any drilling mud into a mud sump, the discharger shall submit to the Regional Board a technical report on the construction of said sump, and a certificate signed by a California Registered Civil Engineer stating that the sump and attendant facilities are constructed to meet the requirements contained in Board Order No. 82-20.
2. At least 10 days before the initial discharge of any drilling mud from the well, the discharger shall report the plan to discharge to the Board.

<u>Constituents</u>	<u>Units</u>	<u>Reporting Frequency</u>
3. Volume of wastes contained in sump.	Gallons	Monthly
4. Volume of saline drilling mud and salt and brine waste hauled to a Class I or Class II-1 waste disposal site, and name of site.	Gallons	Monthly
5. Volume and total dissolved solids concentration of non-saline drilling mud hauled to a Class II-2 waste disposal site, and name of site.	Gallons and mg/l	Monthly

6. Representative samples of drilling mud and cuttings proposed to be discharged at a Class II-2 waste disposal site shall be analyzed for the following constituents, with results reported to the Regional Board at least 5 days prior to the proposed disposal.

<u>Constituents</u>	<u>Units</u>
Arsenic and compounds	mg As/kg wet sample weight
Barium (excluding barite) and compounds	mg Ba/kg wet sample weight
Lead compounds, inorganic	mg Pb/kg wet sample weight
Lead compounds, organic	mg Pb/kg wet sample weight
Zinc compounds	mg Zn/kg wet sample weight

THE FOLLOWING SHOULD BE NOTED, AS REFERENCED TO ORDER NO. 82-20

- A. The waste is designated hazardous if the wet weight analysis of any of the above constituents exceeds the Total Threshold Limit as listed in Attachment A. Discharge Specification No. 6 prohibits disposal of this material into other than a Class I disposal site, or into a Class II-1 disposal site approved by the Regional Board to receive this material. No further analyses are necessary.
- B. The waste is considered to contain non-hazardous levels of the above substances if all of the wet-weight analyses of the above constituents do not exceed the Soluble Threshold Limits as listed in Attachment A. Discharge Specification No. 7 prohibits disposal of this material into other than a Class II-2 disposal site or into other than a more restrictive disposal site (Class I or appropriate Class II-1), provided the waste also complies with the other Discharge Specifications and Provisions in this Order. No further analyses of the metal constituents are necessary.
- C. If the analyses of the waste do not conform to the conditions described under Sections A or B, above, extractions of the soluble waste constituents must be made in accordance with a procedure approved by the Executive Officer and analyzed for those constituents in which the wet weight concentrations exceeded the Soluble Threshold Limits as listed in Attachment A.
- i. If the wet weight analysis of any of the soluble constituents exceeds the Soluble Threshold Limits as listed in Attachment A, the waste is designated hazardous and is not acceptable for disposal in a Class II-2 waste disposal site.

- ii. If the wet weight analyses of all of the soluble constituents do not exceed the Soluble Threshold Limits as listed in Attachment A the waste is considered to contain non-hazardous concentrations of these constituents. Discharge specification No. 7 prohibits its disposal in other than a Class II-2 disposal site or into other than a more restrictive disposal site (Class I or appropriate Class II-1), provided the waste also complies with the other Discharge Specifications and Provisions in this Order.
7. Immediate reporting of any accidental spillage or release of waste material, and plan for immediate measures being taken to correct same and to limit detrimental effects.
8. Report of completion of removal of all wastes from the mud sump - reported within one week following completion of work.
9. At least 10 days prior to destruction of the sump, the discharger shall request a Regional Board staff inspection and approval of the cleanup procedure.

REPORTING

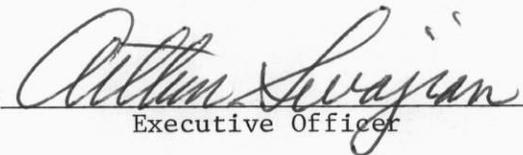
The above monitoring program shall be implemented immediately upon commencement of discharge.

Monthly reports shall be submitted to the Regional Board by the 15th day of the following month. Reports for Item 7 (above) shall be forwarded immediately, and if at all possible, shall be preceded by phone communication to the Regional Board's office (714) 346-7491. Copies of the reports submitted to the Board pursuant to this Monitoring and Reporting Program shall be maintained at the operations site, and shall also be made available to the staff of the Regional Board upon request.

Mail reports to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY:


Executive Officer

May 19, 1982

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7

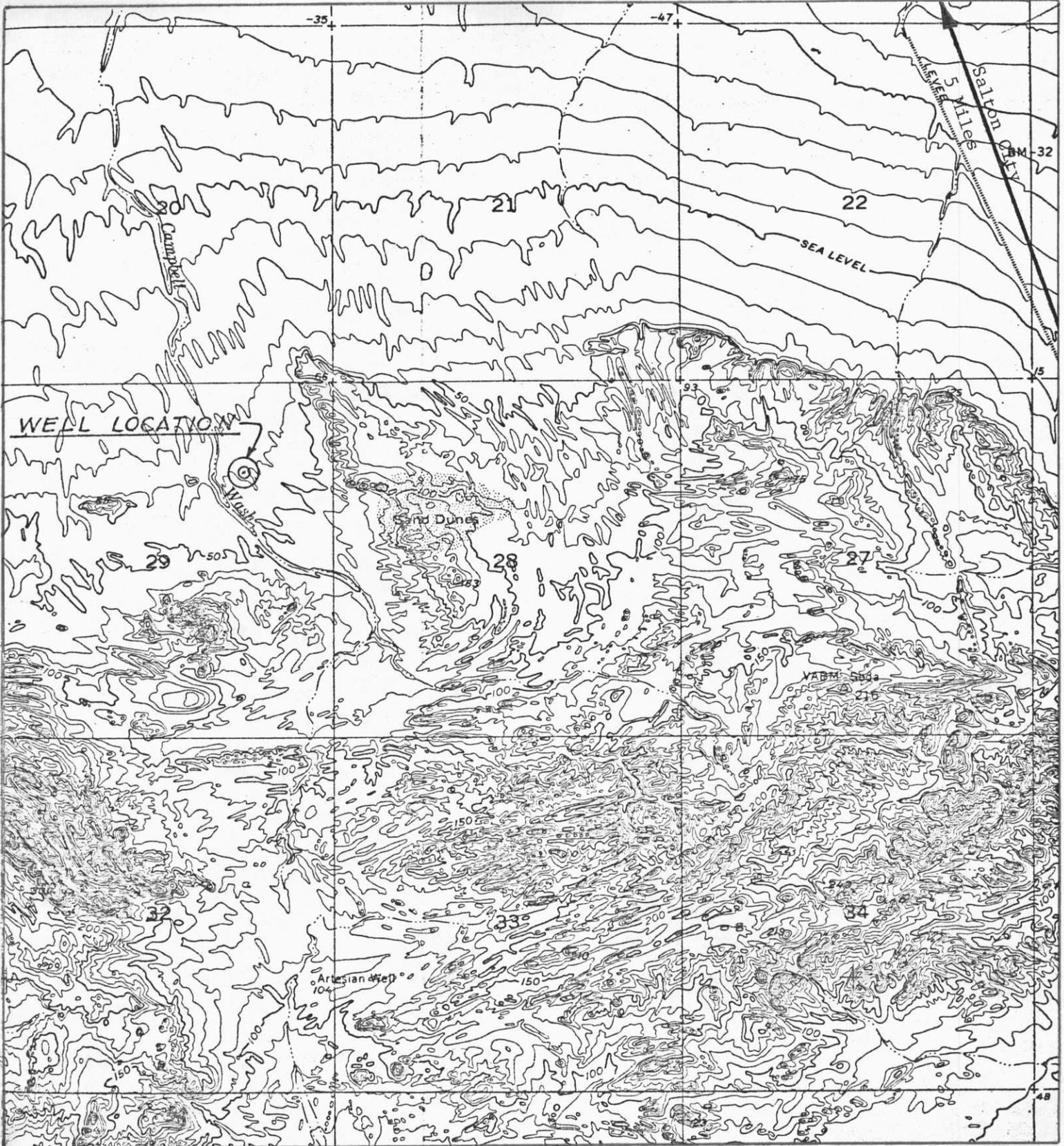


SITE MAP NO. 1

TOMAHAWK OIL AND MINERALS, INC.
NATURAL GAS WELL

South of Salton City - Imperial County
SW Corner, NE 1/4, NE 1/4 of Section 29, T11S,R10E,SBB&M

Order No. 82-20



N
↑
Scale
1" = 2000'

SITE MAP NO. 2
TOMAHAWK OIL AND MINERALS, INC.
NATURAL GAS WELL
SW Corner, NE 1/4, NE 1/4 of Section 29, T11S, R10E, SBB&M
USGS Kane Spring NW 7.5 Min. Topographic Map

Order No. 82-20