1R - 428-72

WORKPLANS

Date:
2-18-10

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266.0745

February 18, 2010

RECEIVED

FEB 19 2010

Environmental Bureau
Oil Conservation Division

Mr. Edward J. Hansen
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: **Investigation & Characterization Plan**
Hobbs Jct. O-13, NMOCD Case # 1R428-72
Township 18S, Range 37E, Section 13, Unit O

Mr. Hansen:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is pleased to submit this Investigation & Characterization Plan (ICP) for the Hobbs Jct. O-13 site. Plate 1 is a map showing the site relative to major roads in the area. Plate 2 shows the site, nearby USGS monitoring wells, and a regional potentiometric surface map.

The work elements proposed below will allow us to characterize this site and develop an appropriate corrective action plan.

1. ROC will identify and document the location of all current and historic equipment and pipelines associated with the site.
2. ROC will use a backhoe with a 12-foot vertical reach to install a series of sampling trenches in order to recover soil samples and delineate the lateral extent (and potentially the vertical extent) of impacted soil.
3. If characterization by the backhoe is insufficient to define the extent and magnitude of past releases, ROC and Hicks Consultants will use a drilling rig to drill one soil boring at the center of the source area to delineate the vertical extent of chloride in the soil.
4. Soil samples obtained by the backhoe or drilling rig will be obtained from regular intervals below ground surface.
5. Representative soil samples will be sent to a laboratory to allow for verification of the field chloride and PID results.
6. General soil texture descriptions will be provided for each sample trench or boring.
7. The criteria to delineate the extent of impact during trenching as well as in a soil boring is 5 point chloride decline vs. depth, or:
    a. After three consecutive samples demonstrate <250 ppm chloride using field analyses and <100ppm total hydrocarbon vapors using the headspace method, or
    b. After five consecutive samples show a decreasing trend of chloride and hydrocarbons and the last sample shows chloride < 250 ppm and total hydrocarbon vapors <100ppm.
    c. Soil boring to capillary fringe should neither (a) or (b) apply.
8. If the boring penetrates the capillary fringe, a monitoring well will be completed with a 2 or 4" diameter casing down gradient from confirmed impact for use during possible corrective actions. Ground water will be analyzed for chloride, sulfate, TDS and BTEX if warranted. Plate 2 presents a potentiometric surface map for the site area.
9. If field analysis of hydrocarbon vapors and observations of staining show that hydrocarbon impact is unlikely at the site or below 20-feet, collection of samples from cuttings may be substituted for split spoon sampling (chloride only).

The ROC trench characterization will be employed to identify the lateral extent of chloride at the site, if possible. If trenching does not fully characterize the lateral extent of chloride at the site, boreholes will be advanced 20 feet beyond the furthest trenches where the soil data has an average chloride concentration greater than 1,000 mg/kg. The total depth of borings drilled to characterize lateral extent shall be 20 feet below ground surface with soil samples for delineation taken at 5 foot intervals.

Rice Operating Company (ROC) is the service provider (agent) for the Hobbs Saltwater Disposal System and has no ownership of any portion of pipeline, well, or facility. A consortium of oil producers who own the Hobbs System (System Parties) provide all operating capital on a percentage ownership/usage basis. Major projects require System Parties' authorization for expenditures (AFE) approval and work begins as funds are received. We will implement the work outlined herein after NMOCD approval and subsequent authorization from the System Parties. The Hobbs SWD system is in abandonment.

For all environmental projects, ROC will choose a path forward that:

1. Protects public health,
2. Provides the greatest net environmental benefit,
3. Complies with NMOCD Rules,
4. Is supported by good science.

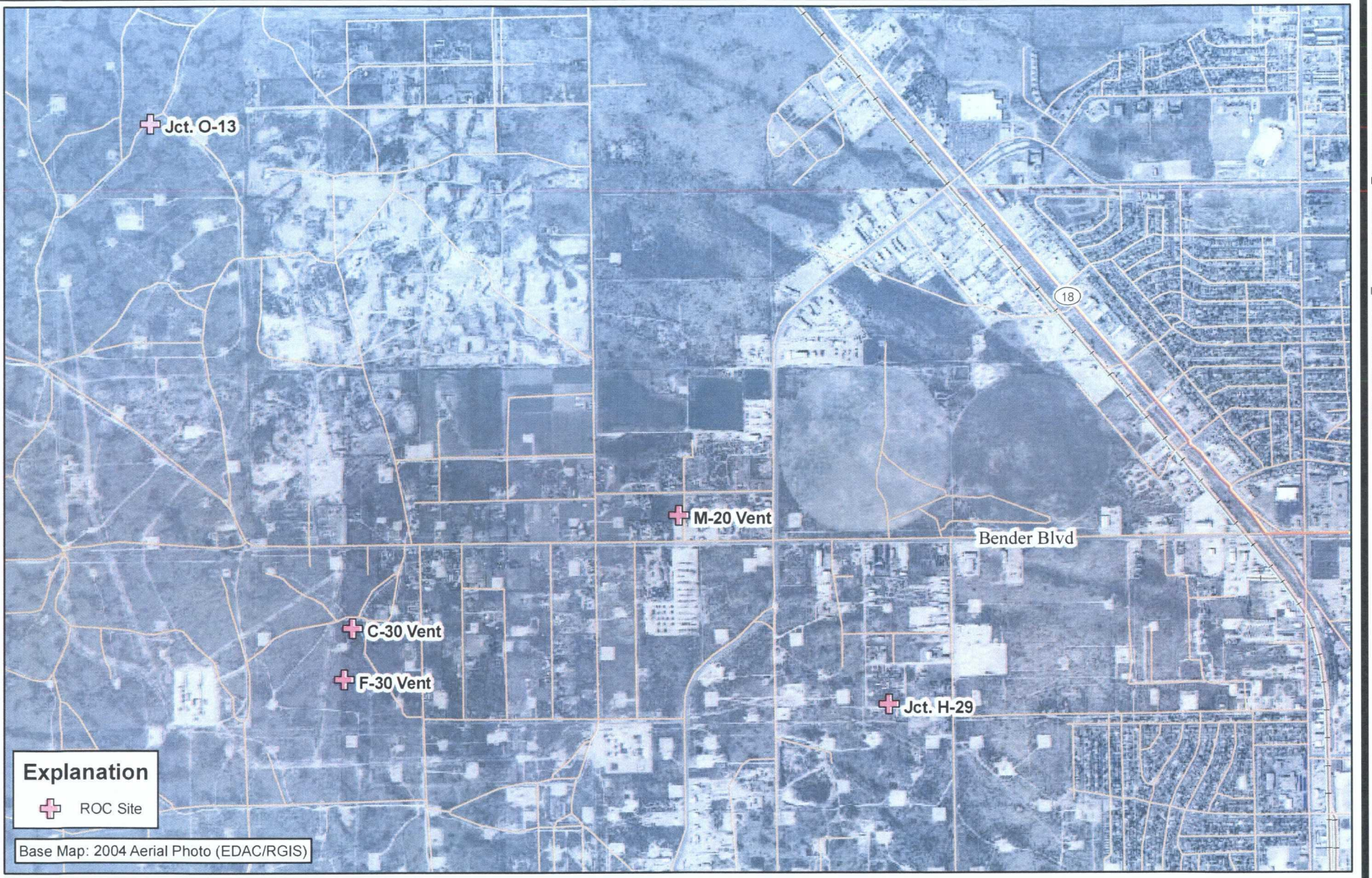
Following the site characterization described above, a Corrective Action Plan with the data and analysis supportive of a procedure for site file termination, or a termination request will be submitted, depending on characterization findings.

Please contact Hack Conder of ROC at 575-393-9174 if you have any questions concerning this submission. Thank you for your time and consideration.

Sincerely,
R.T Hicks Consultants, Ltd.

Katie Lee
Project Scientist

Copy: Hack Conder, ROC



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Location of Sites Near Hobbs, NM
C-30 Vent, F-30 Vent, Jct. H-29, Jct. O-13, M-20 Vent

Plate 1

Rice Operating Company
2010 Hobbs Investigation and Characterization Plan

February 2010

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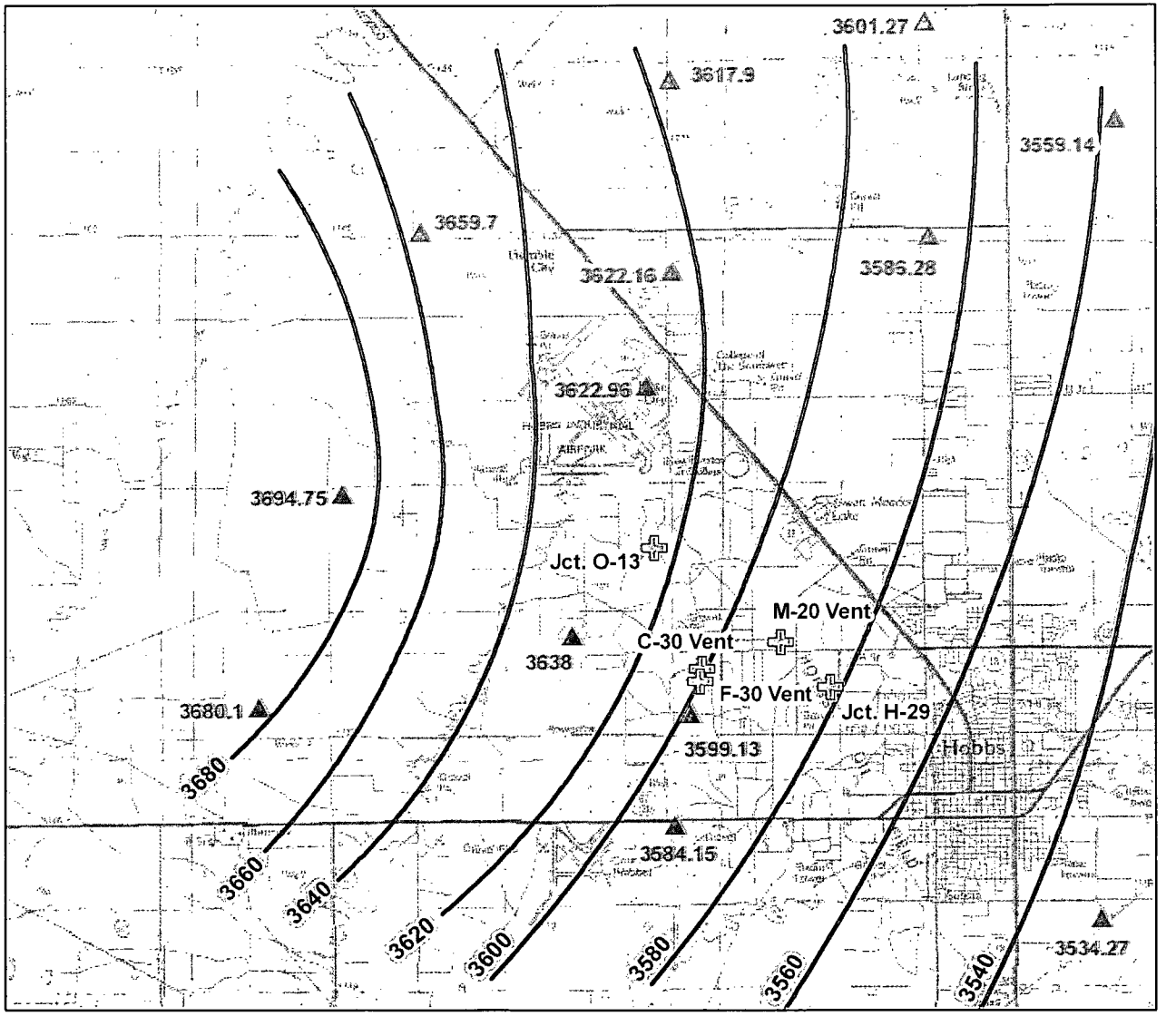

Explanation

- ROC Site
- USGS gauging station (2007) [ground water elevation (ft)]
- Potentiometric surface (ft amsl) (derived from USGS 2007)

N W E S

0 1 2 Miles

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2007 Poteniometric Surface Map
C-30 Vent, F-30 Vent, Jct. H-29, Jct. O-13, M-20 Vent

Plate 2

Rice Operating Company
2010 Hobbs Investigation and Characterization Plan

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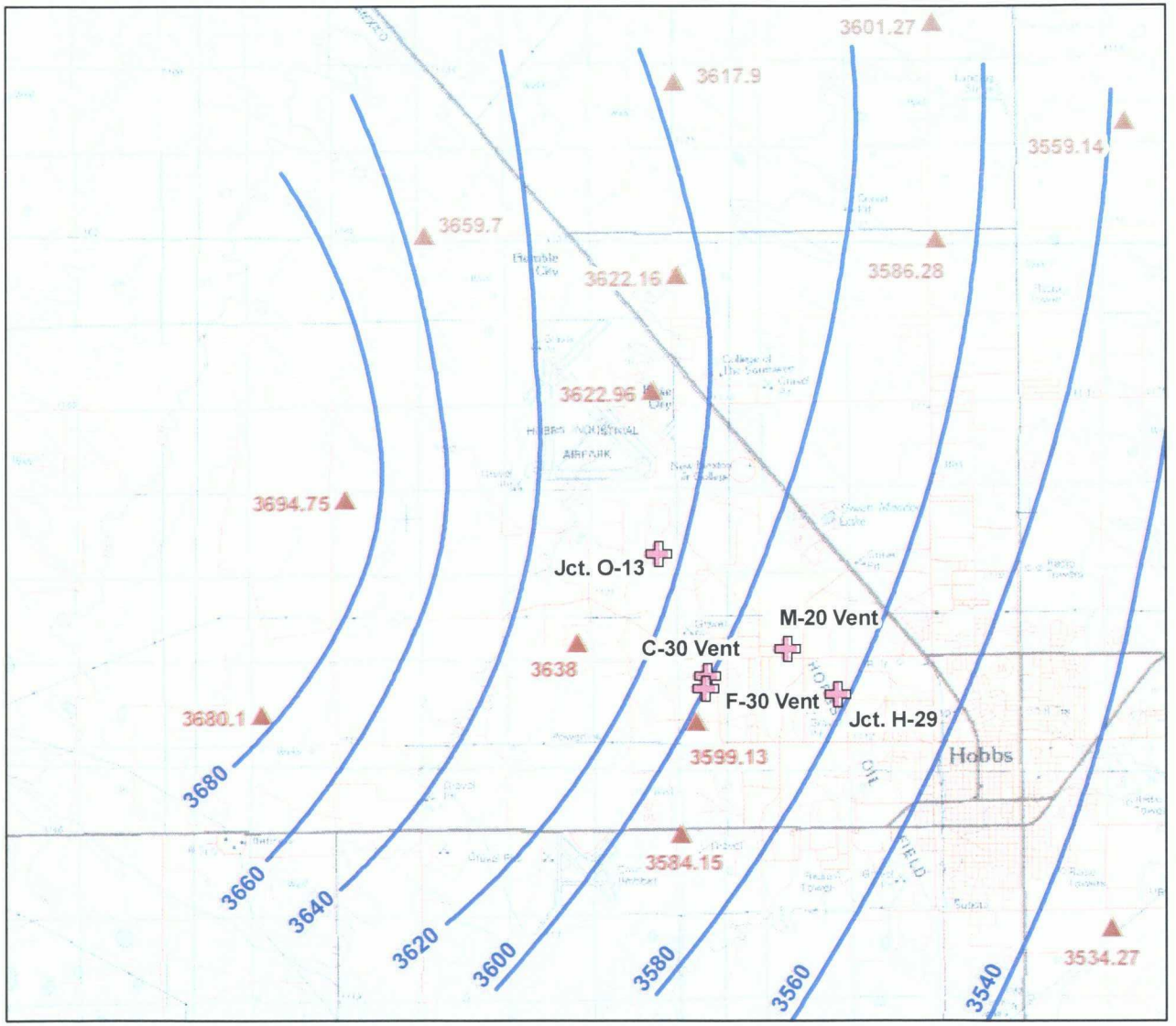

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Plate 2

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