AP - 27

# STAGE 1 & 2 WORKPLANS

DATE:

Nov 8, 2002

**RICE** *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240
Phone: (505)393-9174 • Fax: (505) 397-1471

**CERTIFIED MAIL**
**RETURN RECEIPT NO. 7000 1530 0005 9895 4626**

November 8, 2002

Mr. William Olson
NM Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: STAGE 2 ABATEMENT WORK PLAN (AP-27)
E-15 RELEASE SITE
BLINEBRY DRINKARD (BD) SWD SYSTEM
Unit Letters D&E, Sec. 15, T22S, R37E
Lea County, New Mexico

Mr. Olson:

Rice Operating Company (ROC) is providing the attached work plan addressing your conditions of approval listed in your letter of July 10, 2002 for the above site.

ROC is the service provider (operator) for the BD Salt Water Disposal System and has no ownership of any portion of the pipeline, well or facility. The BD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. Closure projects require System Partner AFE approval and work begins as funds are received. The excavation and encapsulation portion of the work was completed in March 2002 and the report was submitted to the NMOCD in May 2002.

The accidental discharge that occurred at this site caused the ground water to be impacted with produced water. ROC proposes to install a recovery well at this site to remove chloride impact and monitor groundwater constituents. The proposal includes sampling the groundwater at the existing monitor wells to evaluate their response to the abatement process.

Thank you for your consideration of this plan. If you have any questions or comments, please call.

RICE OPERATING COMPANY

Donnie Anderson
Project Leader – Environmental

Enclosures E-15 Stage 2 Work Plan

Cc: CDH,file, Mr. Chris Williams
NMOCD, district 1 Office
1625 French Drive
Hobbs, NM 88240

# E-15 STAGE 2 WORK PLAN

The NMOCD conditions of approval are listed in bold type.

1. **Rice shall submit a work plan to complete the delineation of the lateral and vertical extent of ground water contamination. The work plan shall also include a proposed plan for installation and operation of the site recovery well.**

   ROC proposes installing a recovery well according to NMOCD guidelines within the remediated site, adjacent to the encapsulated area. A map showing the proposed site of the new well is attached. The new well will be drilled to the bottom of the aquifer or a maximum depth of 200' bgs. Once the drilling enters the ground water, samples will be taken every 20' and field tested on-site for chlorides. The well will be screened in the bottom 20'. Screen will also be installed 5' above the ground water surface and at least 10' below the groundwater surface.

   ROC will install a submersible pump in the water well (RW#1). The ground water will be pumped to a frac tank on location. The tank will contain a float system to control the water flow into the BD SWD system line located adjacent to this site. A low-flow meter will be used to determine the amount of water removed from the well and disposed of into the BD SWD system. A check valve will be installed to prevent back flow to the tank from the SWD line. The recovery well will be added to the ROC well-checker's list for daily inspection.

2. **Ground water from all monitor and recovery wells shall be sampled and analyzed on a quarterly basis for concentrations of total dissolved solids (TDS) and major cations and anions using EPA approved methods and quality assurance/quality control (QA/QC) procedures.**

   Ground water from all monitor and recovery wells will be sampled and analyzed on a quarterly basis for concentrations of total dissolved solids (TDS) and major cations and anions and sent to a NMOCD approved lab for analysis. This lab will use EPA approved methods and quality assurance/quality control (QA/QC) procedures to perform these analyses.

   After the recovery well is operational, ROC will consider sampling the remaining monitor wells, and field testing for chlorides more often than once per quarter in order to track any changes in these wells. Once enough data is complied to indicate the effect of the recovery well, ROC will propose more ground water delineation, including borings and/or monitor wells to identify the extent of the contamination.

3. **All wastes generated shall be disposed of at an OCD approved facility or in an OCD approved manner.**

   All wastes generated will be disposed of through the BD SWD system. All disposed volumes will be recorded.

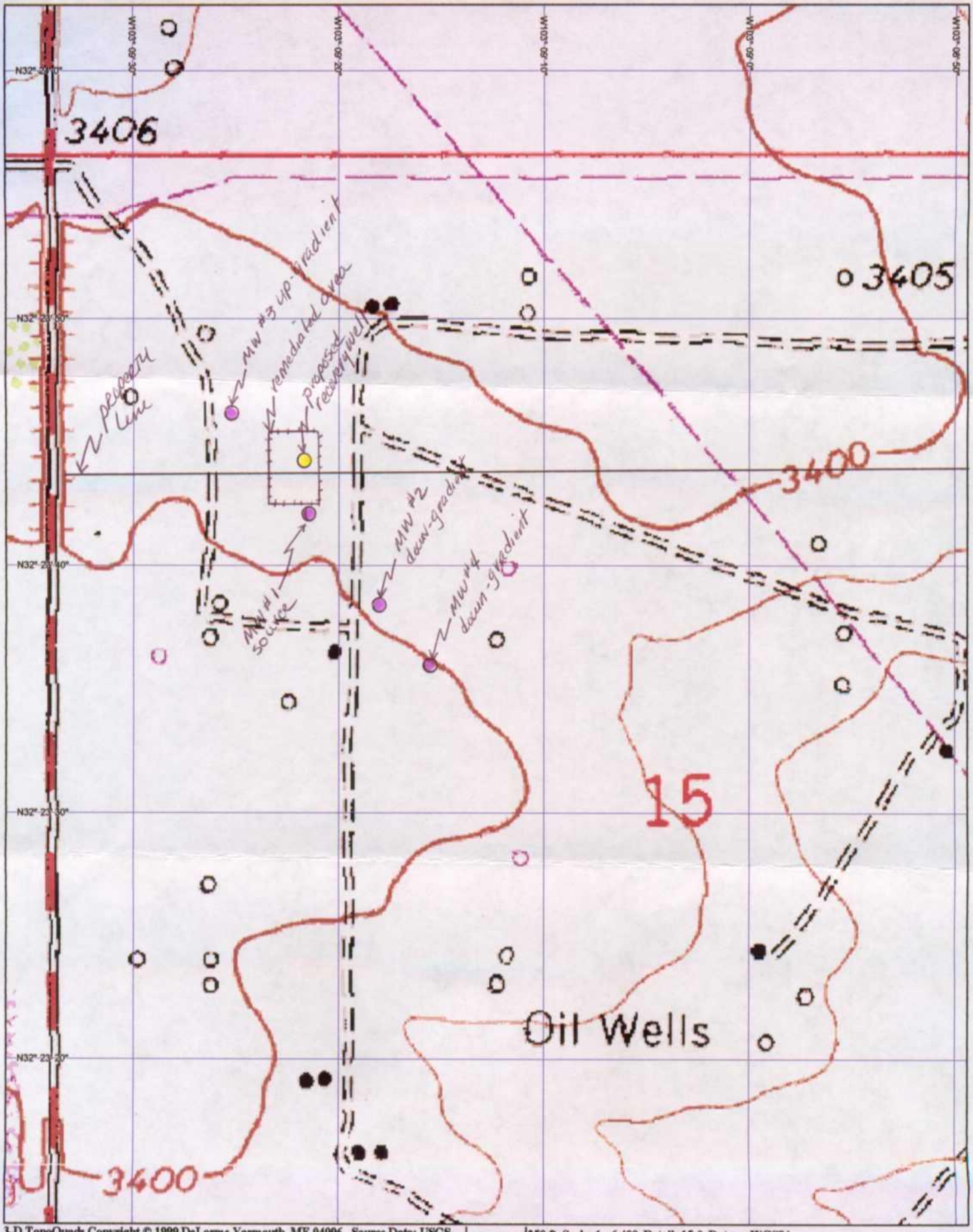
4. **Rice shall submit an annual report containing the results of all site remediation and monitoring activities. The report shall be submitted to the OCD Santa Fe Office by February 2 of each respective year with a copy provided to the OCD Hobbs District Office.**

   Rice will submit an annual report containing the results of all site remediation and monitoring activities. The report will be submitted to the OCD Santa Fe Office by February 2 of each respective year with a copy provided to the OCD Hobbs District Office. The report will contain the following, per the NMOCD:

   a. A description of all soil and ground water remediation and monitoring activities which occurred during the previous calendar year.
   b. Geologic logs and well construction logs for any soil borings, monitor wells and recovery wells constructed during the previous year.
   c. Quarterly water table potentiometric maps showing the location of pipelines, excavations, spills, monitor wells, recovery wells, and any other pertinent site feature, as well as, the direction and magnitude, if known, of the hydraulic gradient.
      Ground water gradient flow has been determined to be to the southeast. (see attached map) The hydraulic gradient flow rate is unknown. There is no public data concerning ground water draw points in this area. It is known that some oil companies in this area use ground water for injection make-up and some landowners use ground water for irrigation. The amount and location of these draw points and their affect on hydraulic gradient flow are unknown.
   d. Quarterly isopleth maps for contaminants of concern.
   e. Summary tables of all past and present ground water quality monitoring results including copies of recent laboratory analytical data sheets and associated QA/QC data.
   f. Summary tables of the monthly amount of water pumped from each recovery well and the total volume pumped to date.
   g. The disposition of all wastes generated.

5. **Rice shall notify the OCD at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.**

   ROC will notify the NMOCD at least 48 hours in advance of all significant events.




 250 ft Scale: 1 : 6,400 Detail: 15-0 Datum: WGS84